

# College of SOCIAL SCIENCE 

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In the complex and rapidly changing world of the $21^{\text {st }}$ century, the educated person is responsible for acquiring the ability to think critically about the social, behavioral and economic phenomena that constitute our human environment. The departments, schools and programs of the College of Social Science are committed to advancing knowledge and transforming lives by providing educational opportunities that will foster the expertise needed to address the problems confronting citizens of our increasingly globalized and highly technological world.
The College of Social Science offers graduate and undergraduate courses and degree programs, research initiatives, and specializations through the following units: Departments of Anthropology, Economics, Geography, History, Political Science, Psychology, and Sociology; Schools of Criminal Justice, Labor and Industrial Relations, Planning, Design and Construction, and Social Work; a Program in Urban and Regional Planning; Other Units such as Women, Gender, and Social Justice (administered jointly with College of Arts and Letters); Center for Integrative Studies in Social Science; Center for Advanced Study of International Development; Center for Global Change and Earth Observations; Center for Humane Arts, Letters and Social Sciences Online (MATRIX); Center for Remote Sensing and Geographic Information Science Research and Services; Julian Samora Research Institute, and the Institute for Public Policy and Social Research. The College also sponsors or co-sponsors several specializations, both graduate and undergraduate, which are described below.

In cooperation with other components of the University, the College of Social Science engages in the pursuit and application of knowledge from emerging interdisciplinary perspectives. For
example, the College collaborates with the following units: College of Human Medicine, College of Agriculture and Natural Resources, College of Arts and Letters, College of Natural Science, College of Education, University Outreach, International Studies and Programs, Institute for Children, Youth and Families, Institute for International Health, Centers for African Studies, Asian Studies, Canadian Studies, and Latin American and Caribbean Studies, and the Evening College.

## UNDERGRADUATE PROGRAMS

The College of Social Science offers degree programs in its departments and schools, and in the Interdisciplinary Studies in Social Science major. A student should carefully study the catalog descriptions of these majors before choosing one. The three general types of majors in the College are described below.

A departmental major consists of at least 30 credits in courses recognized by the department as counting toward the major. Each departmental major is designed to provide concentrated study in a specific field; it will be complemented by courses outside the major to give breadth to a student's education.

A student majoring in one of the schools is introduced to principles and techniques which are basic to the subject area and then learns to apply them in specified programs of study. The minimum number of credits required varies among programs. In each school, the major program consists of courses offered within the school and course work in complementary disciplines.

The Interdisciplinary Studies in Social Science major requires at least 42 credits in courses recognized by the College
as counting toward the major. This is a broadly based major which organizes courses around a thematic concentration with a career focus in one of the following fields: Community Relations, Environmental Policy, Health Studies, Human Aging, Human Resources and Society, International Studies, Law and Society (Prelaw), and Public Policy Studies.
Majors in the College lead to Bachelor of Arts and Bachelor of Science degrees. They provide a valuable background for those interested in a wide variety of careers, as well as for those intending to pursue advanced degrees in professional or graduate school.

## Specializations

In addition to undergraduate major programs, the College offers several specializations, which may be combined with the requirements of a student's degree program. Specializations are offered in: African American History and Culture (see Department of History), African Studies, Asian Pacific American Studies, Asian Studies, Canadian Studies, Chicano/Latino Studies, International Development, Latin American and Caribbean Studies, Peace and Justice Studies, Security Management (see School of Criminal Justice), and Spatial Information Processing (see Department of Geography).
Students in Social Science may also complete a Bioethics, Humanities, and Society Specialization (see the College of Human Medicine section of this catalog).

Students in Social Science may also complete an Environmental Studies Specialization (see the College of Natural Science section of this catalog), and numerous specializations offered by other colleges.

## Freshmen and Sophomores

Freshmen and sophomores at MSU are enrolled in the Undergraduate University Division but may declare a "major preference" for a major in a department or school of the College of Social Science, or in the Interdisciplinary Studies in Social Science major. Students who declare any Social Science major preference will be assigned an academic adviser in this College.

## Admission as a Junior to the College of Social Science

1. Completion of at least 56 credits acceptable to the College.
2. An academic record which at least meets the requirements of Academic Standing of Undergraduate Students.
3. Acceptance as a major in a program of the College. The number of students admitted to the Social Work and Landscape Architecture programs at the junior and senior levels is limited.
Students will find it difficult to complete a degree program in two years after acceptance in the College as a junior unless a minimum of 60 credits, including some of the program requirements, are earned during the first two years.

## Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees

To ensure an appropriately broad and well-balanced education, all undergraduates enrolled in the College of Social Science must satisfy the following subject matter and credit distribution requirements, in addition to the graduation requirements of the University as described in the Undergraduate Education section of this catalog.

The following restrictions pertain to all courses taken in fulfillment of requirements for the Bachelor of Arts and Bachelor of Science degrees in the College of Social Science:

1. Courses applied to the University requirements in Integrative Studies and Mathematics may not also be counted toward the college graduation requirements.
2. Not more than 4 credits of independent study, internship, field experience, or practicum courses may be used to fulfill the college requirements for the Bachelor of Arts and BacheIor of Science degrees.
3. Unless otherwise noted, no courses offered by a student's major department of school may be counted toward the college requirements.
4. Only credits in courses graded on the numerical or Pass-No Grade system may be counted toward College and major requirements, i.e. courses taken in satisfaction of College and major requirements may not be taken on a Credit-No Credit basis.
I. Bachelor of Arts

All candidates must meet the following requirements:
A. SOCIAL SCIENCE REQUIREMENT

1. Complete the requirements of a major of no fewer than 30 credits with a minimum 2.00 grade-point average for courses in the major.
2. Complete a minimum of 15 credits in the following departments, schools, and programs: Anthropology, Criminal Justice, Economics, Geography, Landscape Architecture, Political Science, Psychology, Social Work, Sociology, and Urban and Regional Planning. A maximum of 4 credits of Social Science 493 or 496 may apply.
Students with majors in the department or school must meet this requirement with courses outside the major. Students in the Interdisciplinary Studies major must meet this requirement with courses outside the disciplinary cognate. A department or school may require its majors to complete specific courses to satisfy this college requirement. The courses in the College of Social Science that have been specifically designated by the Curriculum and Academic Policies Committee for the college requirement in Natural Science may not be used to satisfy this requirement.
B. ARTS AND LETTERS REQUIREMENT

Complete a minimum of 9 credits in the College of Arts and Letters. A department or school may require its majors to complete specific courses or particular subject matter areas in the College of Arts and Letters to satisfy this college requirement.
C. NATURAL SCIENCE REQUIREMENT

Complete a minimum of 6 credits in the College of Natural Science or in alternative courses selected from a list approved by the Curriculum and Academic Policies Committee. A department or school may require its majors to complete specific courses or particular subject matter areas in the College of Natural Science to satisfy this college requirement. Mathematics 1825, 100E, and 290 may not apply to this requirement for the Bachelor of Arts degree.
D. DISTRIBUTION REQUIREMENTS

1. Complete a minimum of 30 credits in courses numbered at the 300 level and above. Courses offered by the student's major department or school may be used to satisfy this requirement.
2. A maximum of 12 credits of independent study may be applied to the degree.
3. A maximum of 12 credits of internship, field experience, or practicum credits may be applied to the degree.
4. The total of independent study, internship, field experience, and practicum credits applied to the degree may not exceed 20 credits.
II. Bachelor of Science

All candidates must meet the following requirements:
A. SOCIAL SCIENCE REQUIREMENT

1. Complete the requirements of a major of no fewer than 30 credits with a minimum 2.00 grade-point average for courses in the major.
2. Complete a minimum of 9 credits in the following departments, schools, and programs: Anthropology, Criminal Justice, Economics, Geography, Landscape Architecture, Political Science, Psychology, Social Work, Sociology, and Urban and Regional Planning. A maximum of 4 credits of Social Science 493 or 496 may apply.
Students with majors in the department or school must meet this requirement with courses outside the major. Students in the Interdisciplinary Studies major must meet this requirement with courses outside the disciplinary cognate. A department or school may require its majors to complete specific courses to satisfy this college requirement. The courses in the College of Social Science that have been specifically designated by the Curriculum and Academic Policies Committee for the college requirement in Natural Science may not be used to satisfy this requirement.
B. ARTS AND LETTERS REQUIREMENT

Complete a minimum of 6 credits in the College of Arts and Letters. A department or school may require its majors to complete specific courses or particular subject matter areas in the College of Arts and Letters to satisfy this college requirement.
C. NATURAL SCIENCE REQUIREMENT

Complete a minimum of 15 credits in relevant courses in science and mathematics as defined by the major unit offering the B.S. degree option. Mathematics 1825, 100E, 103, 103E, and 290 may not apply to this requirement for the Bachelor of Science degree.
D. DISTRIBUTION REQUIREMENTS

1. Complete a minimum of 30 credits in courses numbered at the 300 level and above. Courses offered by the student's major department or school may be used to satisfy this requirement.
2. A maximum of 12 credits of independent study may be applied to the degree.
3. A maximum of 12 credits of internship, field experience, or practicum credits may be applied to the degree.
4. The total of independent study, internship, field experience, and practicum credits applied to the degree may not exceed 20 credits.

## Preprofessional Programs

Students at MSU may select programs of study which satisfy the admission requirements of a professional school of their choice, such as law or medicine. Since the admission requirements to professional programs vary among schools, it is not feasible to establish a single program for each profession that satisfies the admission requirements of all professional schools. In the field of law, however, the College of Social Science has suggested pro-
grams of study that satisfy the admission requirements of most law schools. It is the student's responsibility to determine whether a proposed program meets the entrance requirements of the desired professional school.

Prelaw. Prelaw programs in the College of Social Science are available through the Department of Political Science, and the Interdisciplinary Studies in Social Science Program. For additional information refer to those sections and to the University statement on prelaw programs in the Undergraduate Education section of this catalog.

Premed. Students preparing for medical school may pursue a premed program in combination with the B.S. degree program in several majors in the College, such as Anthropology, Psychology, Sociology or the Health Studies concentration in the Interdisciplinary Studies in Social Science major. Declared premed majors will be advised by a preprofessional adviser in the College of Natural Science as well as by the academic adviser in their Social Science major.

## Honors Study

The College of Social Science encourages honors students to develop distinctive undergraduate programs in their chosen fields. In each major a specially designated Honors Adviser, usually a member of the faculty, assists students to plan a rigorous and balanced program tailored to the students' individual interests and abilities.

Departments and schools of the College offer honors courses and seminars at both introductory and advanced levels. These courses are provided chiefly, but not exclusively, for members of the Honors College. In addition, the College offers independent study and research opportunities for Honors College students whose interests in social, behavioral, and economic science reach beyond the topics covered by College courses.

## SPECIALIZATION IN AFRICAN STUDIES

The Specialization in African Studies, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. Although the specialization complements a number of major fields, students who plan graduate study related to Africa, who wish to pursue careers in international agencies in the United States and other countries, or who wish to work in Africa may find the specialization particularly appealing. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree.

The Specialization in African Studies provides a multidisciplinary educational experience for students who are interested in Africa. The specialization is designed to help students to acquire a better understanding of diverse aspects of African environments, economies, politics, societies, and cultures.

The undergraduate adviser for African studies in the College of Social Science, located in Room 100 International Center, coordinates the specialization on behalf of the Dean. That adviser assists the student in planning a program of study that is tailored to the student's interests, disciplinary major, and career objectives. The student's program of study for the specialization must be approved in advance and in writing by the adviser for African studies.

## Specialization in African Studies

## Requirements for the Specialization in African Studies ${ }^{1}$

The student must complete the requirements for one of the three alternatives, $\mathrm{A}, \mathrm{B}$, or C. Each alternative consists of specified numbers of credits from two or three of the four sections that are described below: General Core Courses; African Language Courses; Thematic Concentrations; and Independent Study, Research, and Fieldwork.

## A - BROAD ALTERNATIVE

A minimum of 21 credits to include:
At least 9 credits from the General Core Courses section.
At least 9 credits from the Thematic Concentrations section.
These 9 credits must be from two of the thematic areas.
At least 3 credits from the Independent Study, Research, and Fieldwork section.

## B - LANGUAGE EMPHASIS ALTERNATIVE

A minimum of 20 credits to include:
At least 9 credits from the General Core Courses section.
At least 8 credits from the African Language Courses section.
These 8 credits must be from courses in a single
language, and study must extend over one full academic year.
At least 3 credits from either the Thematic Concentrations section or the Independent Study, Research, and Fieldwork section.

C - LANGUAGE PROFICIENCY ALTERNATIVE:
A minimum of 25 credits to include:
At least 9 credits from the General Core Courses section.
At least 16 credits from the African Language Courses section. These 16 credits must be from courses in a single language, and study must extend over two full academic years.

CREDITS

1. General Core Courses

ANP 416 Anthropology of Southern Africa.
ANP 450 African Archaeology
EC 414 Economic Analysis of Sub-Saharan Africa. .............. 3
$\begin{array}{lll}\text { ENG } & 363 & \text { African Literature.. } \\ \text { GFO } & 338 & \text { Geography of Afric }\end{array}$
GEO 338 Geography of Africa
HST 360 African History to 1800
$\begin{array}{llll}\text { HST } & 361 & \text { African History since } 1800 \\ \text { HST } & 484 & \text { Seminar in African Histo }\end{array}$
3
IAH 211A Area Studies and Multicultural Civilizations: $\begin{aligned} \text { Africa (I). . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . }\end{aligned}$
IAH 211C Area Studies and Multicultural Civilizations:
ISS 330A Africa: Social Science Perspectives (I) ${ }^{2}$................. . . 4

MC 324B Regional Politics, Cooperation, and Conflict in Sub-Saharan Africa
MC 492 Senior Seminar in International Relations (W) ${ }^{3}$.
PLS 351 African Politics
2. African Language Courses 101 A Elementary Swaili

AFR 101B Elementary African Language I
$\begin{array}{lll}\text { AFR } & \text { 101B } & \text { Elementary African Lang } \\ \text { AFR } & \text { 102A } & \text { Elementary Swahili II. }\end{array}$
AFR 102B Elementary African Language il
AFR 151 Beginning Individualized African Language i............................. 4
AFR 152 Beginning Individualized African Language II. . . . . . . . . . . . 4
AFR 201A Second Year Swahili I.
AFR 201B Second-Year African Language I.
AFR 202A Second Year Swahili II
AFR 202B Second-Year African Language II
AFR 251 Intermediate Individualized African Language I.
AFR 252 Intermediate Individualized African Language II.
AFR 290 Independent Study ......................................................... 1 to 4
AFR 450A Advanced Swahili
AFR 450B Advanced African Language . . . . . . . . . . . . . . . . . . . . . . . . . 1 to 5
AFR 490 Independent Study ............................................ . . . . . 1 to 4
ARB 101 Elementary Arabic
ARB 102 Elementary Arabic II
ARB 201 Second-Year Arabic I.
ARB 202 Second-Year Arabic II
ARB 290 Independent Study
ARB 490 Independent Study
3. Thematic Concentrations

Cultural, Historical, and Linguistic Studies
ANP 416 Anthropology of Southern Africa .......................... 3

ANP 420 Language and Culture ${ }^{3}$. .
ANP 450 African Archaeology
ANP 491 Topics in Anthropology
ENG 363 African Literature
ENG 463 Studies in the Literature of Africa and the
African Diaspora
ENG 471 Third World Cinema
HA 204 Asian and African Art
HA 470 Art of West Africa

| HA | 471 | Art of Central, Southern and Eastern Africa | 3 |
| :---: | :---: | :---: | :---: |
| HST | 208 | The African Experience. | 4 |
| HST | 360 | African History to 1800 | 3 |
| HST | 361 | African History since 1800 | 3 |
| HST | 362 | West Africa 1500 to 1900 | 3 |
| HST | 363 | East Africa since 1500 | 3 |
| HST | 364 | Southern Africa since 1800 | 3 |
| HST | 484 | Seminar in African History (W) | 3 |
| IAH | 211A | Area Studies and Multicultural Civilizations: Africa (I) ${ }^{2}$. | 4 |
| ISS | 310 | People and Environment (1) ${ }^{2}$ |  |
| ISS | 330A | Africa: Social Science Perspectives (I) ${ }^{2}$ | 4 |
| JRN | 475 | International News Media ${ }^{3}$ | 3 |
| PLS | 351 | African Politics. | 3 |
| REL | 491 | Special Topics in Religious Studies ${ }^{3}$. | 3 |
| Ecology, Demography, and Agriculture |  |  |  |
| ANP | 491 | Topics in Anthropology ${ }^{3}$ | 3 |
| ANS | 480 | Animal Systems in International Development ${ }^{3}$ | 3 |
| EEP | 260 | World Food, Population and Poverty ${ }^{3}$ | 3 |
| FOR | 450 | Forestry in International Development ${ }^{3}$ | 3 |
| FSM | 462 | Agricultural Development in Less Developed Countries ${ }^{3}$. | 3 |
| GEO | 338 | Geography of Africa | 3 |
| GEO | 435 | Geography of Health and Disease ${ }^{3}$ | 3 |
| ISS | 310 | People and Environment (1) ${ }^{2}$ | 4 |
| Socioeconomic Change and Development |  |  |  |
| ANP | 322 | Peasants and Social Change in the Developing World ${ }^{3}$. | 3 |
| MC | 324B | Regional Politics, Cooperation, and Conflict in Sub-Saharan Africa . | 4 |
| PLS | 351 | African Politics. | 3 |
| Conflict and Resolution in Africa |  |  |  |
| MC | 324B | Regional Politics, Cooperation, and Conflict in Sub-Saharan Africa . | 4 |
| MC | 390 | Advanced Topics in Public Affairs ${ }^{\frac{1}{3}}$. . . . . . . | 4 |
| SOC | 215 | Race and Ethnicity ${ }^{3}$. | 3 |
| Studies in the African Diaspora |  |  |  |
| ENG | 463 | Studies in the Literature of Africa and the African Diaspora. | 3 |
| FRN | 440 | Francophone Cultures and Civilizations ${ }^{3}$ | 3 |
| HST | 310 | African American History to 1876 | 3 |
| HST | 311 | African American History Since 1876 | 3 |
| HST | 312 | African American Women | 3 |
| HST | 383 | History of the Caribbean since 1500. | 3 |
| IAH | 211C | Area Studies and Multicultural Civilizations: The Americas (D) ${ }^{2}$ | 4 |
| ISS | 330C | Latin America: Social Science Perspective (I) ${ }^{2}$ | 4 |
| SOC | 215 | Race and Ethnicity ${ }^{3}$. | 3 |

4. Independent Study, Research, and Fieldwork

Three to 5 credits in a course that is related to one
of the following activities:
a. a research paper based on library research on orfield work in Africa (3 credits)
b. community outreach activities on Africa-related projects in Michigan (3 credits).
c. an internship or field work related to Africa, or study in Africa (3 to 5 credits).
${ }^{1}$ In certifying the completion of the requirements for the Specialization in African Studies, a given course shall be counted only once.
${ }^{2}$ Only one of the following courses may be used to satisfy the requirements for the Specialization in African Studies: Integrative Studies in Arts and Humanities 211A, 211C; Integrative Studies in Social, Behavioral, and Economic Sciences 310, 330A, 330C. That course may also be used to satisfy University requirements.
${ }^{3}$ This course may be counted toward the requirements for the Specialization in African Studies only if the topic is specifically related to or focused on Africa and the undergraduate adviser for African studies has approved the counting of the related credits toward the requirements for the specialization.
${ }^{4}$ In addition to courses in Swahili and Arabic, courses in Hausa are currently being offered
Upon completion of the requirements for the Specialization in African Studies as specified by the undergraduate adviser for African studies, the student should contact that adviser and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

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## SPECIALIZATION IN ASIAN PACIFIC AMERICAN STUDIES

The Specialization in Asian Pacific American Studies is available as an elective to students enrolled in bachelor's degree programs at Michigan State University. Although the specialization complements a number of major fields, students who plan graduate study related to the social sciences, ethnic studies, literature, media studies, or history may find this specialization appealing. Students interested in pursuing professional training in business administration and management, city and regional planning, counseling, education, law, library and information science, public health, and social welfare may also be interested.

The specialization is designed to focus on social and cultural history and contemporary issues relating to Asian Pacific Americans, a diverse group who come from varying class, ethnic, religious, and national backgrounds. The specialization incorporates an interdisciplinary approach to issues and populations in the United States and includes exposure to current research, case studies, and contact with local communities.

Students who are interested in this specialization must contact the coordinator for the Specialization in Asian Pacific American Studies. The student's program of study for the specialization must be approved in advance and in writing by the coordinator for Asian Pacific American Studies. With the approval of the department and college that administer the student's degree program, courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for a bachelor's degree. Certain courses in the specialization may require approval of the department or college that administers the course, and enrollment in a specific section as approved by the coordinator of the specialization. Some requirements may be fulfilled by other courses, if approved in advance by the coordinator of Asian Pacific American Studies. A list of approved courses is available from the coordinator.

## Requirements for the Specialization in Asian Pacific American Studies

CREDITS
Students must complete:.
17 to 23

1. Core Courses ( 8 or 9 credits)
a. The following course:

SSC 291 Introduction to Asian Pacific American Studies
b. One of the following courses

IAH 211C Area Studies and Multicultural Civilizations: The Americas (D)
ISS 335 National Diversity and Change: United States (N)
c. One of the following courses

ANP 330 Race, Ethnicity and Nation: Anthropological Approaches to Collective Identity . . . . . . . . . . 3
MC 281 Immigrants, Minorities, and American Pluralism .
.4
MC 385 Comparative Race and Ethnic Relations .......... . . . 4
SOC 215 Race and Ethnicity . . . . . . . . . . . . . . . . . . . . . . . . . . 3
2. Two of the following courses ( 6 to 9 credits):

ANP 434 Contemporary Issues in Asian America (D) . . . . . . . . . . 3
ANP 437 Asian Emigrant Communities: A Global Perspective ... 3

ENG 464 Studies in the Literature of Asia and the Asian Diaspora (W)
. 3
FCE 442 Ethnic Minority Families in America . . . . . . . . . . . . . . . . . . 3
HST 319 Asian American History. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MC 391 Selected Topics in Public Affairs. . . . . . . . . . . . . . . . . . . . . . 3
MC 498 Senior Seminar in Social Relations (W) . . . . . . . . . . . . . . 5
SOC $499 \quad \begin{aligned} & \text { Social Issues and Change in Contemporary } \\ & \text { Society (W). . . . . . . . . . . . . . . . . . . . . . . . . . . . } 3\end{aligned}$
SW 492 Seminar in Social Work. . . . . . . . . . . . . . . . . . . . . . . . . . 3
WRA 444 Writing in American Cultures: The Dynamics and Rhetoric of Ethnicity
. . 3
3. Capstone and Enrichment Courses (3 to 5 credits) One of the following:
a. Internship

SSC 493 Social Science Internship hip . .
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The internship (or other approved internship) should focus on experiential learning related to the Asian Pacific American commu-
nity. Any core faculty member affiliated with the specialization can supervise the internship.
b. Heritage Courses (3 to 5 credits)

Heritage courses focus on Asian populations in their countries of origin, rather than in a United States or other diasporic context outside of their homeland. A substantial amount of content is on Asia. An approved list of courses is available from the coordinator of the specialization.
c. Asian Language Courses (3 to 5 credits)

Only second-year and above Asian language courses will count toward the specialization. An approved list of courses is available from the coordinator of the specialization.
Other options such as study abroad, domestic study away courses, and independent study to conduct a research project are available if they are approved in advance by the coordinator of the specialization.
Upon completion of the requirements for the Specialization in Asian Pacific American Studies, the student should contact the Dean of the College of Social Science and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## SPECIALIZATION IN ASIAN STUDIES

The Specialization in Asian Studies, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. Although the specialization complements a number of major fields, students who plan graduate study related to Asia or who wish to pursue careers in government or with corporations in Asia may find the specialization particularly appealing. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree. Courses taken in a Michigan State University Study Abroad program in Asia may be counted toward the specialization with the permission of the Director of the Asian Studies Center and the student's adviser.

The Specialization in Asian Studies provides an opportunity for students to create a multidisciplinary specialty with Asia as the focus. The undergraduate adviser for Asian Studies, located in Room 110 International Center, assists the student in planning a program of study that is tailored to the student's interests, disciplinary major, and career objectives. The student's program of study for the specialization must be approved in advance and in writing by the adviser for Asian Studies.

## Requirements for the Specialization in Asian Studies ${ }^{1}$

1. The student must complete one of the following options.
a. Language Emphasis ( 32 to 35 credits):

Core - at least one course. ..................................... 3 or 4
Chinese or Japanese language-fulfillment of second-year competency
Thematic Concentration - at least two courses.

Independent study course culminating in a research paper 3
b. General Emphasis ( 21 to 29 credits):

Core - at least one course.
Thematic Concentration - select one of the following:
(1) at least five courses in the Thematic Concentration selected from two different departments
(2) at least three courses in the Thematic Concentration selected from two different departments and a maximum of 10 credits in an Asian language. . . . . . . . . . . . . . . . . . 15 to 22 Independent study course culminating in a research paper
2. The courses used to fulfill either option are listed below:
a. Core courses (select one):

IAH 211B Area Studies and Multicultural Civilizations: Asia (I) ${ }^{2}$.

4
IAH 211C Area Studies and Multicultural Civilizations: The Americas (D) ${ }^{2}$. 4
4
ISS $\quad 315$ Global Diversity and Interdependence (I)
ISS $\quad 330 \mathrm{~B}$ Asia: Social Science Perspectives (I) ..... 4
TE 311 Growing Up and Coming of Age in Three
TE 311 Growing Up and Coming of Age in ThreeSocieties (D)
$\begin{array}{ll}\text { ASN } & 290 \\ \text { ASN } & \text { Independent Study ................ }\end{array}$
ASN 401 East Asian Cultures (W) ............
ASN 464 Studies in the Literature of Asia and the Asian Diaspora (W)
ASN 490 Independent Study
ASN 101 Special Topics in Asian Languages
CHS 101 Elementary Chinese I ${ }^{3}$.
CHS 102 Elementary Chinese II 105 Introductory Chinese with Business Emphasis
CHS 201 Second-Year Chinese I ${ }^{3}$
CHS 202 Second-Year Chinese II ${ }^{3}$
CHS 301 Third-Year Chinese I
CHS 302 Third-Year Chinese II
CHS 350 Studies in the Chinese Language
CHS 401 Fourth-Year Chinese I
CHS 402 Fourth-Year Chinese II ${ }^{3}$
CHS 499 Senior Thesis Research
JPN 101 Elementary Japanese I
JPN 102 Elementary Japanese II ${ }^{3}$
JPN 113 Elementary Japanese II A
JPN 114 Elementary Japanese II B
JPN 201 Second-Year Japanese I
JPN 202 Second-Year Japanese II ${ }^{3}$
JPN 301 Third-Year Japanese I
JPN 302 Third-Year Japanese II ${ }^{3}$
JPN 350 Studies in Japanese Language.
JPN 401 Fourth-Year Japanese I
JPN 402 Fourth-Year Japanese II ${ }^{3}$
JPN 499 Senior Thesis Research .
c. Thematic Concentration courses (see item 1. for credit require-
ment):
Department of Anthropology
ANP 201 Sociocultural Diversity ${ }^{4}$
ANP 414 Anthropology of South Asia.
ANP 415 China: Culture and Society
Department of Art and Art History
HA 260 East Asian Art
HA 462 The Arts of China
HA 463 Japanese Art
Department of Economics
EC 340 Survey of International Economics ${ }^{4}$
EC 385 International Labor Market Policy and Labor Relations ${ }^{4}$
EC 410 Issues in Economics of Developing Countries ${ }^{4}$.
EC 413 Economic Analysis of Asia
Department of English
ENG 130 Film and Society ${ }^{4}$
ENG 352 Asian American Writing
ENG 360 Postcolonial Literature and Theory ${ }^{4}$
ENG 361 Asian Literature in English or in English Translation.

Cinema ${ }^{4}$
ENG 431B Third Wartive Fiction: Non-Western
ENG 464 Studies in the Literature of Asia and the Asia Diaspora (W)
Department of Geography
GEO 337 Geography of East Asia
Department of History
HST 201 Historical Methods and Skills
HST 201H Historical Methods and Skills for Honors Students
HST 209 Traditional East Asia
HST 210 Modern East Asia
HST 319 Asian American History
HST 367 Imperial China.
HST 368 China since 1900
HST 369 Japan to 1800
HST 370 Japan since 1800
HST 393 History of India

HST 485 Seminar in Asian History (W)
Department of Human Environment and Design
HED 465 International Consumer Distribution Systems ${ }^{4}$.
HED 471 International Buying and Product Development ${ }^{4}$
James Madison College
MC 220 International Relations I: World Politics and International Security ${ }^{4}$
MC 320 Politics, Society and Economy in the Third World ${ }^{4}$.
MC 324D Regional Politics, Cooperation and Conflict
in Asia
MC 492 Senior Seminar in International Relations ${ }^{4}$ (W). School of Music
MUS 425 Music of South Asia and Its Diaspora
MUS 429 Music of East and Southeast Asia
Department of Political Science
PLS 342 Comparative Political Economy ${ }^{4}$
PLS 344 Politics in the Third World ${ }^{4}$

d. Independent Study (3 credits):

At least 3 credits of an independent study course approved in advance by the undergraduate adviser for Asian Studies. While enrolled in this course, the student must submit a substantial senior research paper on Asia based on primary sources, library research, or field work in Asia.
${ }^{1}$ With the approval of the undergraduate adviser for Asian Studies, courses other than those listed below may be counted toward the requirements for the Specialization in Asian Studies.
${ }^{2}$ This course may also be used to satisfy University requirements.
${ }^{3}$ In order for Chinese or Japanese language courses to be counted toward the requirements for the Specialization in Asian Studies, the student must complete two sequential courses in a language. A maximum of 10 credits in Chinese or Japanese language courses may be used to satisfy the requirements for the General Emphasis.
${ }^{4}$ Allowable when taught with substantial Asian content.
Upon completion of the requirements for the Specialization in Asian Studies as specified by the undergraduate adviser for Asian studies, the student should contact that adviser and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## SPECIALIZATION IN CANADIAN STUDIES

The Specialization in Canadian Studies is designed for students who plan careers with an international orientation focused on inter-American relations involving Canada. The specialization provides an opportunity for students to increase their understanding of:

1. the processes of social, economic, political, and cultural change in Canada and in Canada's international relations.
2. how the structure of the contemporary world system influences Canadian affairs.
3. how culture shapes the process of national development in one of the major world regions.
Multidisciplinary in theory and practice, the specialization is based on the methodologies, theories, and literatures of the social sciences and liberal arts. It involves faculty from the social sciences, arts, languages, and applied professional fields.

The specialization is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. The specialization is administered by the College of Social Science.

With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree.

Students who elect the specialization are encouraged to study French or another language spoken by a significant minority in Canada.

The academic adviser for Canadian studies in the College of Social Science, located in Room 205 South Kedzie Hall, coordinates the specialization on behalf of the Dean. That adviser assists the student in planning a program of study that is tailored to the student's interests, disciplinary major, and career objectives. The student's program of study for the specialization must be approved in advance and in writing by both the adviser for Canadian studies and the Associate Dean for Academic and Student Affairs in the College of Social Science.

## Requirements for the Specialization in Canadian Studies

The student must complete a minimum of 18 credits at the 200 level or above, distributed as follows:

## 1. Core courses:

10
a. The following course:

ISS 336 Canada: Social Science Perspectives (I) . . . . . . . 4 Integrative Studies in Social, Behavioral and Economic Sciences 336 may be used to satisfy both the requirements for the Specialization in Canadian Studies and University requirements.
b. Six credits from the following courses:

ENG 465 Canadian Literature. ............................... 3
GEO 230 Geography of United States and Canada . . . . . . . . 3
HST 329 History of Canada . . . . . . . . . . . . . . . . . . . . . . . . . 3
2. Eight additional credits in courses relevant to Canadian studies includ-
ing 4 credits related to one of the following options:
a. A study abroad experience.
b. An internship with a public or private sector agency or organization.

Upon completion of the requirements for the Specialization in Canadian Studies as approved by both the adviser for Canadian studies and the Associate Dean in the College of Social Science, the student should contact the adviser for Canadian studies and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## SPECIALIZATION IN INTERNATIONAL DEVELOPMENT

The Specialization in International Development, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. The specialization should be attractive to students who plan careers with an international orientation and who, therefore, wish to add a strong international dimension to their disciplinary majors. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree.
The Specialization in International Development is designed for students who wish to increase their understanding of the processes of continuity and change in various regions of the world, particularly Africa, Asia, Eastern Europe, and Latin America. The specialization provides an opportunity for students to learn how the structure of the contemporary world system influences international relations and national development, as well as how culture shapes the process of national development in one of the major world regions. Multidisciplinary in theory and practice, the specialization is based on the methodologies, theories, and literatures of the social sciences and liberal arts and involves faculty from the social sciences, arts, languages, and applied professional fields.

The academic adviser for international development in the College of Social Science assists the student in planning a program of study that is tailored to the student's interests, disciplinary major, and career objectives. The student's program of study for the specialization must be approved in advance and in writing by the adviser for international development.

## Requirements for the Specialization in International Development

The student must meet the requirements specified below:
CREDITS
2. Foreign Language Proficiency: Demonstrate proficiency in a modern foreign language equivalent to four semesters of study at the university level. The results of the MSU foreign language placement test will be considered in determining whether or not the student has fulfilled this requirement. The student is encouraged to complete a fifth semester of study in the language that focuses on the culture, history, and literature of a developing region of the world.
3. Conceptual/Descriptive Courses: Complete at least one of the following courses (3 or 4 credits):
ANP 322 Peasants and Social Change in the Developing World.
ANP 470 Food, Hunger, and Society.
EC 410 Principles of Economic Development
EEP 260 World Food, Population and Poverty
ISS 315 Global Diversity and Interdependence (I) . . . . . . . . . . . . . .
ISS 315 Global Diversity and Interdependence (I)
PLS 344 Politics in the Third World
SOC 362 Developing Societies.
4. Applied Courses: Complete at least one of the following courses that is a field other than the student's major (2 or 3 credits):
ANP 370 Culture, Health, and Illness.
ANR 481 Agricultural Research Systems
in Developing Countries
ANS 480 Animal Systems in International Development.
$\begin{array}{lll}\text { EC } & 411 & \text { Issues in Economic Development. . . . } \\ \text { FOR } & 450 & \text { Forestry in International Development }\end{array}$
FSM 462 Agricultural Development in Less Developed
Countries
GEO 435 Geography of Health and Disease
GEO 445 Environment and Development Policy
PLS 342 Comparative Political Economy
SOC 452 Environment and Society
UP 408 Comparative Urban Development Planning
WS 403 Women and Change in Developing Countries
5. International Area Courses: Complete at least one course in any one of the following four geographic areas (3 or 4 credits):
Africa and the Middle East
$\begin{array}{lrrl}\text { ANP } & 416 & \text { Anthropology of Southern Africa . . . . . . . . . . . . . . . . . . . } \\ \text { ANP } & 417 & \text { Anthro }\end{array}$
ANP 417 Anthropology of East Africa
EC 414 Economic Analysis of Sub-Saharan Africa.
GEO 338 Geography of Africa
HST 208 The African Experience.
HST 361 African History since 1800
HST 364 Southern Africa since 1800
HST 373 The Middle East 1250-1914
HST 484 Seminar in African History (W)
ISS 330A Africa: Social Science Perspectives (I)
MC 324A Regional Politics, Cooperation, and Conflict .......... . .
MC in the Middle East. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
in Sub-Saharan Africa . . . . . . . . . . . . . . . . . . . . . . . . 4
PLS 351 African Politics.
$\begin{array}{ll}\text { Asia } \\ \text { ANP } & 413 \\ \text { Cultures of Southeast Asia }\end{array}$
ANP 414 Anthropology of South Asia.
ANP 415 China: Culture and Society
EC 413 Economic Analysis of Asia
GEO 337 Geography of East Asia
HST 368 China since 1900
HST 485 Seminar in Asian History (W)
ISS 330B Asia: Social Science Perspectives
MC 324D Regional Politics, Cooperation and Conflict in Asia.
PLS 354 Politics of Asia.
Eastern Europe
EC 406 Economic Analysis of the Soviet Union and Transition Economy
HST 342 Eastern Europe
HST 344 Russia and the Twentieth Century
Latin America and the Caribbean
ANP 410 Revolution and Social Change in Latin America
EC 412 Economic Analysis of Latin America
GEO 335 Geography of Latin America
HST 381 Latin America since 1820.
HST 382 History of Brazil since 1822.
HST 384 History of Mexico since 1810
HST 385 Modern Spanish Central and South America
HST 486 Seminar in Latin American History (W).
ISS 330C Latin America: Social Science Perspectives (I)
MC 324C Regional Politics, Cooperation, and Conflict in Latin America and the Caribbean
6. Field Experience, Internship, Thesis, or Independent Study
(3 or 4 credits): Complete one of the following three options:
a. An overseas field experience or internship in one of the four geographic areas listed in item 5. above.
b. A domestic internship that involves working on local development issues.
c. A thesis or independent study under the direction of a faculty member.
7. Senior-level Seminar or Capstone Course (3 or 4 credits).

Complete one course with significant international development content.

1. Complete a minimum of 18 credits in courses at the 200 level or above excluding any credits in courses that are used to satisfy the Foreign Language Proficiency requirement referenced in item 2. below. Not more than 4 of the 18 credits may be in 200-level courses.

Only one of the following four courses may be used to satisfy the requirements for the international development specialization: Integrative Studies in Social, Behavioral, and Economic Sciences $315,330 \mathrm{~A}, 330 \mathrm{~B}$, or 330C. That course may also be used to satisfy University requirements.

Upon completion of the requirements for the Specialization in International Development as specified by the undergraduate adviser for international development, the student should contact the Dean of the College of Social Science and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## SPECIALIZATION IN LATIN AMERICAN AND CARIBBEAN STUDIES

The Specialization in Latin American and Caribbean Studies, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. Although the specialization complements a number of major fields, students who plan graduate study related to Latin America and the Caribbean, or who wish to pursue careers in the Foreign Service or with corporations in those geographic areas, may find the specialization particularly appealing. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree.
The Specialization in Latin American and Caribbean Studies provides an opportunity for students to create a multidisciplinary specialty with Latin America and the Caribbean as the focus.
The undergraduate adviser for Latin American and Caribbean studies in the College of Social Science, located in Room 300 International Center, assists the student in planning a program of study that is tailored to the student's interests, disciplinary major, and career objectives. The student's program of study for the specialization must be approved in advance and in writing by the undergraduate adviser for Latin American and Caribbean studies.

## Requirements for the Specialization in Latin American and Caribbean Studies

The student must complete a total of 24 credits as specified below:
CREDITS

1. Demonstrate proficiency in Spanish or Portuguese equivalent to two years of study at the university level. The results of the MSU foreign language placement test will be considered in determining whether or not the student has fulfilled this requirement.
2. Complete a minimum of 14 credits in courses from at least three of the departments listed below:
Department of Anthropology
ANP 410 Revolution and Social Change in Latin America. ....... 3 ANP 453 Mesoamerican Archaeology .
Department of Art and Art History
HA 444 Latin American and Latino Art.
Department of Economics
EC 412 Economic Analysis of Latin America.
Department of Geography
GEO 335 Geography of Latin America . . . . . . . . . . . . . . . . . . . . . . 3
Department of History
HST 380 Colonial Latin America
HST 381 National Latin America
HST 382 Modern Brazil
HST 383 The Caribbean
HST 384 Modern Mexico
HST 385 Modern Spanish Central and South America
HST 486 Seminar in Latin American History
Integrative Studies in Arts and Humanities
IAH 211C Area Studies in the Americas
Integrative Studies in the Social, Behavioral and Economic Sciences
ISS 330C Latin America: Social Science Perspectives.

James Madison College
MC 324C Regional Politics, Cooperation, and Conflict in Latin America and the Caribbean
School of Journalism
JRN 391 Current Issues in Journalism.
To be counted toward the requirements for the specialization, the content of Journalism 391 must be specifically related to or focused on Latin America or the Caribbean.
School of Music
MUS 430 Music of the Caribbean
Department of Political Science
PLS 352 Latin American Politics
Department of Spanish and Portuguese
PRT 340 Topics in Luso-Brazilian Language and Culture
SPN 432 Latin America and its Literature
SPN 472 Topics in Literature of the Americas
3. Complete at least 6 additional credits from the courses listed in item 2. above or with the approval of the undergraduate adviser for Latin American and Caribbean studies, other courses having substantial Latin American or Caribbean content may be used to satisfy this requirement.
4. Complete at least 4 credits of advanced study courses approved by the undergraduate adviser for Latin American and Caribbean Studies. At least 2 credits of advanced study must be earned through enrollment in Anthropology 491 Latin American and Caribbean Studies Seminar. An additional 2 credits may be completed by repeating Anthropology 491 or completion of advanced study such as independent study, research, or guided reading.
Upon completion of the requirements for the Specialization in Latin American and Caribbean Studies as specified by the undergraduate adviser for Latin American and Caribbean studies, the student should contact the Dean of the College of Social Science and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## SPECIALIZATION IN CHICANO/LATINO STUDIES

The Specialization in Chicano/Latino Studies, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. Although the specialization complements a number of major fields, students who plan graduate study related to the social sciences or who wish to pursue careers in education, social work, government or businesses that serve mixed ethnic communities may find the specialization particularly appealing. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree.

The Specialization in Chicano/Latino Studies is designed to help students to understand the multicultural dimensions of society; to gain a knowledge of Chicano/Latino scholarship and scholars; and to apply that knowledge to the study of Chicano/Latino communities and life. The specialization draws on research, teaching, and community service among Chicano/Latinos that:

1. Focuses intensively on the histories of different racial and cultural sub-groups of Latinos.
2. Draws larger theoretical lessons from comparisons among these groups and between non-Latino populations.
3. Seeks to articulate general principles that shape racial and ethnic relations.
4. Explores how ethnic identity is constructed and reconstructed over time.
5. Develops methodologies and principles which empower students to enhance leadership and human relations within diverse communities of peoples and conditions.
Students wishing to be advised should consult the Director of the Chicano/Latino specialization in 442 Berkey Hall. The Director, in conjunction with the adviser, assists the student in planning a program of study that is tailored to the student's interests, disciplinary major, and career objectives. The student's pro-
gram of study for the specialization must be approved in advance and in writing by both the adviser for Chicano/Latino studies and the Associate Dean for Academic and Student Affairs in the College of Social Science.

## Requirements for the Specialization in Chicano/Latino Studies

CREDITS
The student must complete a total of 20 credits including:

1. Both of the following courses:

IAH 211C Area Studies and Multicultural Civilizations: The Americas (D)
ISS 335 National Diversity and Change: United States (N) ...... 4
These courses must focus on Chicano/Latino content.
2. Three of the following courses:.

ANP 412 Social and Cultural Status of Latinos
in the U.S.
ENG 351 Chicano and Latino Literatures in English. . . . . . . . . . . . . . . . 3
$\begin{array}{lll}\text { ENG } & 351 & \text { Chicano and Latino Literatures in English. . . . . . . . . . . . . } 3 \\ \text { FCE } & 442 & \text { Ethnic Minority Families in America . . . . . . . . . . . . }\end{array}$
HST 327 History of Mexican Americans in the
HST 383 United States
.3
.3
.3

SOC 215 Race and Ethnicity
SPN 345 Spanish American Culture
SPN 346 Hispanic Cultures in the United States
SPN 485 Topics in Hispanic Literatures of the Americas. This requirement may be fulfilled by other courses with a Chicano/Latino focus, if approved in advance by the Coordinator of Chicano/Latino studies and the adviser. The courses must deal with ethnicity, race, gender, and inequality. To qualify for inclusion, at least one-fourth of the content of the course must focus specifically on Chicano/Latinos in the United States. Typically, courses in the College of Agriculture and Natural Resources, Arts and Letters, and Social Science are used to satisfy the requirement. A list of approved courses is available from the adviser.
3. One of the following three options:
a. A supervised internship relevant to Chicano/Latino studies with a public or private agency or organization. To satisfy this option, the student must complete one course of at least 3 credits approved in advance by the Coordinator and the adviser for Chicano/Latino studies.
b. Directed study abroad relevant to Chicano/Latino studies. To satisfy this option, the student must complete one course of at least 3 credits approved in advance by the Coordinator and the adviser for Chicano/Latino studies.
c. A research experience relevant to Chicano/Latino studies. To satisfy this option, the student must complete one course of at least 3 credits approved in advance by the Associate Dean in the College of Social Science.
Upon completion of the requirements for the Specialization in Chicano/Latino Studies as approved by the Director and the adviser, and the Associate Dean of the College of Social Science, the student should contact the adviser for Chicano/Latino studies and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## SPECIALIZATION IN PEACE AND JUSTICE STUDIES

The Specialization in Peace and Justice Studies, which is administered by the College of Social Science, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. The specialization is devoted to analyzing the causes and manifestations of violence, war, oppression, and injustice and to studying and working toward theoretical and practical alternatives, locally and globally, to create a more peaceful and just world. The specialization complements a wide range of majors and is especially suited for students who plan to include peace and justice issues in their study of law, in international service, or as a member of society.
With the approval of the department and the college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree.

The Specialization in Peace and Justice Studies includes course work, a capstone paper, and electives such as an internship, study abroad, service learning, and independent study. Students in this specialization will focus on the exploration of such interdisciplinary topics as environmental justice, representative democracy and globalism, morality and ethics, conflict resolution, human rights and humanitarian law.

The undergraduate adviser for the Peace and Justice specialization is located in the College of Social Science and will assist the student in planning a program of study tailored to the student's interests, major, and career objectives. The undergraduate adviser for the specialization must approve the student's program of study in writing.

## Requirements for the Specialization in Peace and Justice Studies

All courses must be approved by the undergraduate adviser for Peace and Justice Studies before enrollment.

1. The student must complete the following ( 15 credits):
a. Core Course ( 3 credits). One $400-l e v e l ~ c o u r s e ~ f o c u s i n g ~$ on basic concepts and assumptions of peace and justice, contexts of violence and domination, alternatives to violence and domination, and peace and justice as a practice.
b. Complete the following (12 credits):
(1) At least nine credits at the 300-400 level.
(a) at least three of these credits must be in a subject outside the student's major.
(2) Two courses focusing on themes of violence and domination and/or justice and domination.
c. Capstone Paper. This paper may derive from one of the courses completed for requirements 1.a. or 1.b. It is intended to synthesize themes the student examined in the specialization. A faculty member affiliated with the Specialization in Peace and Justice Studies must approve the paper and inform the undergraduate adviser for Peace and Justice Studies of its satisfactory completion.
2. Electives. ( 1 to 3 credits) An internship, study abroad course, service learning option or independent study. These may be counted toward requirement 1.b. above.
Upon completion of the requirements for the Specialization in Peace and Justice Studies, the student should contact the undergraduate adviser for Peace and Justice Studies and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date it was completed. This information will appear on the student's transcript.

## TEACHER CERTIFICATION OPTIONS

Teacher certification can be attained through the Economics, History, or Interdisciplinary Studies in Social Science (IDS) major. Students who elect the IDS major for teacher certification must contact the Interdisciplinary Studies in Social Science office; those who elect the Economics major must contact the Department of Economics.

The following minors in the College of Social Science also are available for teacher certification: anthropology,economics, geography, history, political science, psychology, and sociology. Students who elect one of these minors for teacher certification must contact the department in which the minor is based.

For more information, refer to the statement on the major referenced above and to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

## GRADUATE STUDY

Units within the College of Social Science offer programs leading to degrees of Master of Arts, Master of International Planning Studies, Master of Labor Relations and Human Resources, Master of Public Policy, Master of Science, Master of Social Work, Master of Urban and Regional Planning, and Doctor of Philosophy.

The following dual degree programs are co-sponsored by the College of Social Science and MSU-College of Law: M.A. in Political Science and J.D., Ph.D. in Political Science and J.D., Master of Labor Relations and Human Resources and J.D.
For information about the following interdisciplinary specializations and degree programs, see the referenced section of this catalog. The College of Social Science is lead sponsor of:
(1) Interdepartmental Specialization in Applied Developmental Science, for master's or doctoral students in anthropology, geography, political science, psychology, sociology, or a MSW program in the School of Social Work (see statement on this specialization, below)
(2) Specialization in Infant Studies, for master's or doctoral students in the departments of Anthropology, Psychology or Sociology, or MSW students in the School of Social Work (see statement on this specialization, below)
(3) Specialization in International Development, for all master's or doctoral students at MSU (see statement on this specialization, below
(4) Interdepartmental Specialization in Cognitive Science, for master's or doctoral students in Geography or Psychology (see statement on this specialization, below)
(5) Graduate Specialization in Environmental Science and Policy for doctoral students enrolled in doctoral degree programs in departments and programs emphasizing environmental science and policy (see statement on this specialization, below)
(6) Specialization in Judicial Administration for all master's students at MSU (see statement on this specialization in the School of Criminal Justice section)
The College of Social Science is a co-sponsor of:
(1) Interdepartmental Graduate Specialization in Ecology, Evolutionary Biology and Behavior for master's students in Anthropology or Psychology (see statement on this specialization in the College of Natural Science section
(2) Interdepartmental Ph.D. program in Ecology, Evolutionary Biology and Behavior for doctoral students in Anthropology or Psychology (see statement on this doctoral program in the College of Natural Science section)
(3) Specialization in Food Safety for master's students in Sociology (see statement on this specialization in the College of Veterinary Medicine section)
(4) Interdepartmental Ph.D. degree program in Neuroscience (see statement on this doctoral program in the College of Natural Science section)
(5) Specialization in Gender, Justice, and Environmental Change, for master's or doctoral students in the College of Social Science (see statement on this specialization in the College of Agriculture and Natural Resources section)
(6) Interdisciplinary Graduate Specialization in Women and Gender, which is administered by the Women's Studies Program, for master's or doctoral students (see statement on this specialization in the College of Arts and Letters section)
(7) Master of Arts degree program in Bioethics, Humanities, and Society (see statement on this master's program in the College of Human Medicine section)
(8) Graduate Specialization in Food and Agricultural Standards for master's and doctoral students enrolled in master's and doctoral degree programs at Michigan State University (see statement on this specialization, below)
Requirements for the various degrees are summarized below. For complete requirements of any given program or degree, contact the appropriate unit in the College and see the Graduate Education section of this catalog. A student must meet the standards of the University, College, and unit.

## Master of Arts

Most students in the College of Social Science pursue the Master of Arts degree, although several other master's degree programs are available through the College.

## Requirements for the Degree

A maximum of 8 credits is allowed for thesis research.

## Academic Standards

The accumulation of grades below 3.0 (including $N$ grades in the $\mathrm{P}-\mathrm{N}$ grading system) in more than two courses of three or more credits each removes the student from the degree program; this policy does not apply to courses below the 400 level unless the courses are required for the student's program.

## Time Limit

The time limit for completion of the master's degree is six years from the beginning of the first semester in which credit was earned toward the degree.

## Other Master's Degrees

Other degrees at the master's level offered by the College are listed below. For a description and summary of the requirements for each degree, consult the section of this catalog devoted to the appropriate department or school. The statements on Academic Standards and Time Limit for the Master of Arts degree also apply to all other master's degrees in the College.

DEGREE
Master of International Planning Studies
Master of Labor Relations
and Human Resources
Master of Science
Master of Public Policy
Master of Social Work
Master in Urban and Regional Planning

DEPARTMENT OR SCHOOL
School of Planning, Design and Construction
School of Labor and Industrial Relations
Department of Geography,
School of Criminal Justice
Department of Political Science
School of Social Work
School of Planning, Design
and Construction

## Doctor of Philosophy

The successful completion of the Doctor of Philosophy degree requires scholarly ability of a high order. Ph.D. degree programs, with emphasis on specialization and research, are offered in each of the departments in the College of Social Science.

## Academic Standards

A doctoral student may earn grades below 3.0 (including $N$ grades in the $\mathrm{P}-\mathrm{N}$ grading system) in not more than two of the courses required by the guidance committee.

# CENTER for INTEGRATIVE STUDIES in SOCIAL SCIENCE 

Assefa Mehretu, Director

Integrative Studies is Michigan State University's unique approach to liberal general education, offering a core curriculum that complements specialized work by students in their majors. Integrative Studies courses integrate multiple ways of knowing and modes of inquiry and introduce students to important ways of thinking in the three core knowledge areas: the Arts and Humanities, the Biological and Physical Sciences, and the Social, Behavioral, and Economic Sciences. They assist students early during their study to develop as more critical thinkers. They also encourage appreciation of our humanity and creativity, human cultural diversity, the power of knowledge, and our responsibilities for ourselves and for our world.
Courses in Michigan State University's Integrative Studies Program are aimed at developing intellectual abilities, including critical thinking and interpretive skills. They help increase knowledge about other times, places, and cultures, key ideas and issues in human experience, and the scientific method and its usefulness in understanding the natural and social worlds. They are expected to enhance appreciation of the role of knowledge, and of values and ethics, in understanding human behavior and solving social problems. Finally, they help students recognize responsibilities and opportunities associated with democratic citizenship and with living in an increasingly interconnected, interdependent world.
The Center for Integrative Studies in the Arts and Humanities in the College of Arts and Letters has primary responsibility for the Arts and Humanities area of Integrative Studies at Michigan State University.

The Center for Integrative Studies in General Sciences in the College of Natural Sciences has primary responsibility for Integrative Studies courses in the Biological and Physical Sciences at Michigan State University.
The Center for Integrative Studies in the Social Sciences in the College of Social Science has primary responsibility for Integrative Studies courses in the Social, Behavioral, and Economic Sciences at Michigan State University.

## INTERDISCIPLINARY STUDIES IN SOCIAL SCIENCE

## UNDERGRADUATE PROGRAMS

The College of Social Science explicitly recognizes that many important and rewarding areas for study do not fit neatly within the boundaries of any single social science discipline, but rather overlap two or more such fields. The College also recognizes that many students do not wish to limit their undergraduate major studies to the specialization of a single disciplinary department or professional school. Many faculty in the College participate in interdisciplinary research focused on scholarly and public concerns shared by several related disciplines. For these reasons,
the College offers a broadly based, coherent, multidepartmental, undergraduate major in interdisciplinary social science.

The interdisciplinary studies in social science major consists of 42 required credits including an 18-credit disciplinary cognate and a 24 -credit interdisciplinary concentration. The following disciplinary cognates are available to students in the major: anthropology, economics, geography, political science, psychology, or sociology. The eight interdisciplinary concentrations that are available to students in the major are described below:

1. Community Relations. In this concentration, students investigate the organizational, environmental, cultural, public policy, and socioeconomic forces that define, characterize, shape, and reshape contemporary communities. This concentration is designed for students who plan to pursue careers or advanced study in public and municipal administration, human services, social work, and urban planning.
2. Environmental Policy. In this concentration, students pursue a wide variety of interests including environmental law, resource ecology, social impact study, policy analysis, geomorphology, and natural resource development and management.

Students in this concentration may elect to participate in MSU's living-learning environmental studies residential program. Students in this program enroll in numerous courses on the environment. They also participate in a variety of academic enrichment and social activities with faculty who are associated with the program.
3. Health Studies. In this concentration, students explore areas of interest such as organizational and institutional analysis of health care providers and delivery systems, social-cultural dimensions of health care, and the economics of health care. This concentration is designed for students who plan to pursue careers or advanced study in medicine, allied health fields, public health, medical industries, health care administration, and public administration.
4. Human Aging. In this concentration, students study demographic shifts in the United States that have led to a population growing ever older. As Americans live longer, they often require more health-related services and other kinds of services in contrast to younger people. This concentration is designed for students who plan careers related to the direct care of older persons. Sites for direct care include nursing homes, hospitals, senior citizen community centers, and retirement communities.
5. Human Resources and Society. In this concentration, students pursue interests in the dynamics of human resources in, and other social and behavioral factors related to, the study of the workplace and the community. Issues such as inequality, pluralism, race, ethnicity, and gender are addressed.
6. International Studies. In this concentration, students pursue interests in international relations, international economic and social development, selected major world areas, or other topical and thematic issues in which the social sciences contribute understanding to concerns involving several nations and the comparative study of societies and cultures around the world.
7. Law and Society. In this concentration, students may emphasize preparation for law school, for graduate study, for careers related to law and the justice system, or for careers in the public, private, and nonprofit sectors.
8. Public Policy Studies. In this concentration, students examine public policy issues and concerns from several analytical and theoretical perspectives. They also examine policy-making processes in a variety of organizational contexts. This concentration is designed for students who plan
to pursue policy-related careers in the public, private, and nonprofit sectors. The concentration is also designed for students who plan to pursue advanced degrees in public policy, public administration, urban planning, and law. Particular emphasis is placed on analytical, quantitative, and research design skills.
Business Emphasis. An optional emphasis in business within the interdisciplinary social science major is available. For additional information, refer to the statement on the Business Emphasis listed below.

Academic advisers in the College's Interdisciplinary Studies office in South Kedzie Hall assist students in developing individualized programs of study, taking into consideration students' interests and career or educational objectives. Students are required to consult with one of these academic advisers on enrollment in the major and once a year thereafter. Each student's program of study, and any changes in the program, must be approved in writing by an academic adviser in the Interdisciplinary Studies office.
To meet both the disciplinary cognate requirement and the interdisciplinary concentration requirement, students select courses from extensive lists of courses that are periodically reviewed and revised by College faculty. Those lists are available in the Interdisciplinary Studies office.

## Requirements for the Bachelor of Arts or Bachelor of Science Degree in Interdisciplinary Studies in Social Science

1. The graduation requirements of the University as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts or Bachelor of Science degree in Interdisciplinary Studies in Social Science
The University's Tier II writing requirement for the Interdisciplinary Studies in Social Science major is met by completing one of the Tier II writing courses that are identified in item a. below or one of the clusters of courses that are identified in item b. below. The course or cluster must be included in the student's Disciplinary Cognate or Interdisciplinary Concentration referenced, respectively, in items 3. a. and 3. b. below:
a. One of the following Tier II writing courses: Geography 432, Political Science

420, 421, 440, 460, 461, 470; Psychology 401, 402, 409, 410, 442, 455; Social Science 499; Urban Planning 343, 365.
b. One of the following clusters of courses:
(1) Two of the following five Anthropology courses: 320, 370, 412, 422, 429.
(2) Two of the following four Geography courses: $335,336,337,338$.
(3) Two of the following five Sociology courses: $321,322,330,424,452$.
2. The graduation requirements of the College of Social Science for the Bachelor of Arts or Bachelor of Science degree. Credits in certain courses referenced in requirement 3. below may also be counted toward requirement I.C.1. or requirement II.D.1. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College's statement. Students should consult with an academic adviser in the Interdisciplinary Studies office concerning courses that are strongly recommended for completing requirements I. A. and B.; or requirements II. A., B., and C.; under the heading Graduation Requirements for the Bachelor of Arts and BacheIor of Science Degrees in the College's statement.
3. The following requirements for the major:
a. Disciplinary Cognate:

18
A minimum of 18 credits in courses in one of the following six disciplines: anthropology, economics, geography, political science, psychology, or sociology. ${ }^{1,2}$ The courses that are used to satisfy the Disciplinary Cognate requirement must be selected from a list of approved courses that is available in the Interdisciplinary Studies office. At least one introductory course, one course in methodology, and two 300-400 level courses must be included in the Disciplinary Cognate.
b. Interdisciplinary Concentration: .

A minimum of 24 credits in one of the eight Interdisciplinary Concentrations referenced below. At least 12 credits in courses in the College of Social Science, at least two courses in each of two different departments or schools, at least 12 credits in 300-400 level courses, and at least two 400-level courses must be included in the Interdisciplinary Concentration.
Community Relations ( 24 credits):
(1) At least two of the following seven courses (6 or 7 credits):

EC 335 Taxes, Government Spending and


SOC 361 Contemporary Communities
UP 201 The Role of Planning in Urban and Regional Development
2) Additional credits in approved courses (17 or 18 credits) ) $_{1,2}$ The additional courses that are used to satisfy the Community Relations Interdisciplinary Concentration must be selected from a list of approved courses that is available in the Interdisciplinary Studies office. Included in this list is GBL 323 Introduction to Business Law (3 credits)
Environmental Policy ( 24 credits):
(1) At least two of the following eight courses ( 6 credits): EC 335 Taxes, Government Spending and Public Policy

| EEP | 255 | Ecological Economics . . . . . . . . . . . . . . . . . . 3 |
| :--- | :--- | :--- |
| FW | 211 |  |

FW 211 Introduction to Gender and Environmental Issues
GEO 432 Environmental Ethics in Geography (W) .... 3
HST 391 Environmental History of North America . . . . . 3
PLS 313 Public Policy Analysis
RD 320 Resource Management and Planning. . . . . . . . 3
SOC 452 Environment and Society
(2) Additional credits in approved courses (18 credits). 1,2 The additional courses that are used to satisfy the Environmental Policy Interdisciplinary Concentration must be selected from a list of approved courses that is available in the Interdisciplinary Studies office.
Health Studies (24 credits):
(1) At least two of the following eight courses (6 or 7 credits): ANP 370 Culture, Health, and Illness
EC 335 Taxes, Government Spending and Public Policy
EC 498 Economics of H
EC 498 Economics of Health Care . . . . . . . . . . . . . . . 3
$\begin{array}{lll}\text { GEO } & 435 & \text { Geography of Health and Disease } \ldots . . . . \\ \text { PHL } & 344 & \text { Ethical Issues in Health Care }\end{array}$

| PHL | 344 | Ethical Issues in Health Care . . . . . . . . . . . . . . . 4 |
| :--- | :--- | :--- |

PLS 313 Public Policy Analysis . . . . . . . . . . . . . . . . . . . . . 3
PSY 320 Health Psychology. . . . . . . . . . . . . . . . . . . . . . . . . 3
2) Additional credits in approved courses (17 or 18 credits). ${ }^{1,2}$ The additional courses that are used to satisfy the Health Studies Interdisciplinary Concentration must be selected from a list of approved courses that is available in the Interdisciplinary Studies office. Included in this list is MGT 325 Management Skills and Processes (3 credits).
Human Aging (24 credits):
(1) The following course (3 credits):

SSC 493 Social Science Internship . . . . . . . . . . . . . . . 3
(2) At least two of the following eight courses (6 to 8 credits): EC 498 Economics of Health Care
FCE 413 Adult Development and the Family:
GEO 435 Geography of Health and Disease . . . . . . . . . . . 3
ISS 210 Society and the Individual (D) . . . . . . . . . . . . . . . 4
NUR 891 Selected Topics. . . . . . . . . . .
PHL 344 Ethical Issues in Health Care . . . . . . . . . . . . . 4
PSY 401 Memory and Skill (W) . . . . . . . . . . . . . . . . . . . . 3
PSY 409 Psychobiology of the Life Span (W) . . ....... 3
(3) Additional credits in approved courses (13 to15 credits). ${ }^{1,2}$

The additional courses that are used to satisfy the Human
Aging Interdisciplinary Concentration must be selected from a list of approved courses that is available in the Interdisciplinary Studies office. Included in this list is GBL 323 Introduction to Business Law (3 credits).
Human Resources and Society ( 24 credits):
(1) At least two of the following seven courses (6 credits): EC 380 Labor Relations and Labor Market Policy . . . . 3 EEP 453 Women and Work: Issues and Policy Analysis.
Analysis. . . . . . . . . . . . . . . . . . . . . . . . . . 3

HST 213 U.S. Business and Economic History . . . . . . . . 3
MGT 325 Management Skills and Processes . . . . . . . . . 3
$\begin{array}{lll}\text { PLS } & 310 & \text { Public Bureaucracy in the Policy Process . . . . } 3 \\ \text { PSY } & 255 & \text { Industrial and Organizational Psychology . . . } 3\end{array}$
SOC 322 Sociology of Work . . . . . . . . . . . . . . . . . . . .
(2) Additional credits in approved courses (18 credits). ${ }^{1,2}$ The additional courses that are used to satisfy the Human Resources and Society Interdisciplinary Concentration must be selected from a list of approved courses that is available in the Interdisciplinary Studies office. Included in this list are: ACC 230 Survey of Accounting Concepts (3 credits); FI 320 Introduction to Finance (3 credits); GBL 323 Introduction to Business Law (3 credits); MGT 315 Managing Human Resources and Organizational Behavior (3 credits); MGT 325 Management Skills and Processes (3 credits); and MSC 327 Introduction to Marketing (3 credits).
International Studies (24 credits):
(1) At least two of the following seven courses (6 credits):

ANP 201 Sociocultural Diversity. . . . . . . . . . . . . . . . . . 3
EC 340 Survey of International Economics . . . . . . . . . . . 3
$\begin{array}{llll}\text { GEO } & 113 & \text { Introduction to Economic Geography . . . . . . } 3 \\ \text { HST } & 390 & \text { History of International Relations . . . . . . . . } 3\end{array}$
PLS 342 Comparative Political Economy. . . . . . . . . . . . . . 3

PLS 362 Foreign Policy
SOC 362 Developing Societies.
2) Additional credits in approved courses (18 credits) $1,2 \ldots \ldots$ additional courses that are used to satisfy the International Studies Interdisciplinary Concentration must be selected from a list of approved courses that is available in the Interdisciplinary Studies office.
(3) Second-year competency in a foreign language. The requirement may be satisfied by placing into a 300 -level foreign language course based on a MSU placement test.
Law and Society ( 24 credits):
(1) At least two of the following eight courses ( 6 credits):

EC 360 Private Enterprise and Public Policy ......... 3
EC 425 Law and Economics ......................... 3

GBL 323 Introduction to Business Law ................ 3
HST 318 United States Constitutional History . . . . . . . . 3
PHL 354 Philosophy of Law . . . . . . . . . . . . .
PLS 320 The American Judicial Process.
PLS 321 American Constitutional Law.
(2) Additional credits in approved courses (18 credits). ${ }^{i, 2}$ The additional courses that are used to satisfy the Law and Society Interdisciplinary Concentration must be selected from a list of approved courses that is available in the Interdisciplinary Studies office. Included in this list are: ACC 230 Survey of Accounting Concepts ( 3 credits); FI 320 Introduction to Finance ( 3 credits); and GBL 323 Introduction to Business Law ( 3 credits).
Public Policy Studies (24 credits):
(1) At least two of the following seven courses ( 6 credits):

EC 335 Taxes, Government Spending and Public Policy ............................. . 3 EC 360 Private Enterprise and and Political PHL 350 Introduction to Social and Political Philosophy. .3
PLS 310 Public Bureaucracy in the Policy Process..... . . 3
PLS 313 Public Policy Analysis .
SOC 331 Political Sociology.
SOC 481 Intentional Social Change .
2) Additional credits in approved courses (18 credits). ${ }^{i, 2}$ The additional courses that are used to satisfy the Public Policy Studies Interdisciplinary Concentration must be selected from a list of approved courses that is available in the Interdisciplinary Studies office. Included in this list is GBL 323 Introduction to Business Law (3 credits).

## Business Emphasis

A minimum of 15 credits is required for the Business Emphasis that is available as an elective to students who are pursuing a Bachelor of Arts or a Bachelor of Science degree with a major in interdisciplinary studies in social science.

This optional emphasis is recommended strongly for students enrolled in any of the above-listed interdisciplinary concentrations. Business emphasis students will be able to enroll in courses offered in the Eli Broad College of Business. These courses provide a basic understanding of the forces and operations that shape and govern the character of contemporary business practice.

The Business Emphasis can be a valuable supplement and/or complement to any of the interdisciplinary concentrations in the interdisciplinary studies in social science major. Therefore, credits earned in these courses may be applied to 3.a. and 3.b. above, if approved by the student's academic adviser.

Many employers in the public and private sectors and many graduate school programs in business, health care administration, labor and industrial relations, law, public policy, and urban affairs are especially interested in interdisciplinary studies students who have included a significant amount of business-related course work in their undergraduate degree programs.

To enroll in the business emphasis, students must meet with an interdisciplinary studies adviser in order to file a program completion form.

## Requirements for the Business Emphasis

1. A minimum of 15 credits.
2. Both of the following courses ( 6 credits): ACC 230 Survey of Accounting Concepts ............. 3 EC 201 Introduction to Microeconomics. . . . . . . . . . . . . 3
3. Three of the following courses ( 9 credits): EC 202 Introduction to Macroeconomics . . . . . . . . . . . 3 FI 320 Introduction to Finance . . . . . . . . . . . . . . . . . . . . 3 $\begin{array}{lll}\text { GBL } & 323 & \text { Introduction to Business Law ................ } 3 \\ \text { MGT } & 325 & \text { Management Skills and Processes . . . . . . . } 3\end{array}$ MSC 327 Introduction to Marketing. . . . . . . . . . . . . . . . . . . 3
${ }^{1}$ The Tier II writing course or the cluster of courses that is used to satisfy the University's Tier II writing requirement for the Interdisciplinary Studies in Social Science major referenced in item 1. above must be included in the student's Disciplinary Cognate or Interdisciplinary Concentration.
${ }^{2}$ Courses in the discipline that is selected to meet the Disciplinary Cognate requirement may not be included in the additional courses that the student selects from a list of approved courses to complete the requirements for an Interdisciplinary Concentration.
${ }^{3}$ Students must meet with an interdisciplinary studies adviser to determine if individual courses may be applied to more than one degree program requirement.
After the student has completed the requirements for the Bachelor of Arts or Bachelor of Science degree with a major in interdisciplinary studies in social science, an academic adviser in the Interdisciplinary Studies office will initiate the certification of the completion of one of the eight Interdisciplinary Concentrations referenced above. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the concentration and the date that it was completed. This certification will appear on the student's transcript.

Students who have fulfilled the requirements for the Business Emphasis, will also receive a business emphasis certificate prepared by the Interdisciplinary Studies in Social Science program.

## TEACHER CERTIFICATION OPTION

The interdisciplinary studies in social science major leading to the Bachelor of Arts or Bachelor of Science degree is available for teacher certification.

Students with an interdisciplinary studies in social science disciplinary major must complete the following additional disciplinary requirements: a minimum of 36 credits in courses in economics, geography, history, and political science combined and a minimum of two courses in each of those disciplines; those courses must be approved in advance by the College of Social Science. The approved courses may also be used to satisfy the requirements referenced in item 3. under the heading Requirements for the Bachelor of Arts or Bachelor of Science Degree in Interdisciplinary Studies in Social Science, as well as the requirements for teacher certification.

For additional information, refer to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

## GRADUATE PROGRAM

In cooperation with the School of Labor and Industrial Relations, the School of Social Work, and the urban and regional planning faculty in the Department of Geography, the College of Social Science offers a Master of Arts degree program with a major in interdisciplinary studies in social science: global applications. The program is designed for international mid-career specialists, managers, and executives who are employed in the public and private sectors in various large-scale, national-level organizations that involve globalization in multilingual situations. The objective of the program is to provide an opportunity for individuals to study the way applied fields of social science may contribute to the resolution of problems that are created by rapid economic globalization. The program focuses on the areas of public housing and urban planning, social service delivery, and labor and industrial relations. The program, which requires full-time study for a period of one year (two semesters and one summer), is available only under Plan B (without thesis).

The Associate Dean for Academic and Student Affairs in the College has administrative responsibility for the Master of Arts degree program with a major in interdisciplinary studies in social science: global applications. The Associate Dean confers with an advisory committee composed of representatives of the faculty in labor and industrial relations, social work, and urban and regional planning on student admissions and program requirements. A program coordinator assists students in planning their programs of study.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

SOCIAL SCIENCE
Interdisciplinary Studies in Social Science:
Global Applications

## Admission

To be considered for admission to the master's degree program in interdisciplinary studies in social science: global applications, an applicant must:

1. Be employed full-time in the public or private sector as an international mid-level specialist, manager, or executive in a large-scale, national-level organization that involves globalization in multilingual situations.
2. Be nominated by his or her employing organization. The employing organization must submit to the College a statement to the effect that if the applicant is admitted to the program the applicant would be granted a one-year absence from the organization and the organization would sponsor the applicant while he or she is enrolled in the program.
3. Take the Graduate Record Examination (GRE) General Test and have the scores submitted to the College.
4. Submit to the College a statement that addresses the applicant's:
a. reasons for applying for admission to the program.
b. willingness to pursue the program full-time during a one-year absence from his or her employing organization and willingness to meet the residence requirement for the program on MSU's East Lansing campus during that year, if he or she is admitted to the program.
To be admitted to the master's degree program in interdisciplinary studies in social science: global applications on regular status, an applicant must have:
5. Completed a bachelor's degree with an acceptable record from a recognized educational institution. Although the field of undergraduate study is not critical for acceptance, an applicant should have completed at least 12 credits in the social sciences.
6. Professional experience acceptable to the College.
7. Demonstrated to the satisfaction of the College quantitative skills (typically algebra or introductory calculus, and statistics) and computer competence sufficient for completing master's level methods courses in the social sciences.
8. Demonstrated to the satisfaction of the College advanced competence in a language other than English.
In addition, an international applicant is required to have fulfilled the University's English language proficiency requirement as described in the Graduate Education section of this catalog by having a total score of 580 (paper version) or 237 (computer version) or above on the Test of English as a Foreign Language and having the approval of the English Language Center.

However, meeting the minimum standards referenced above does not guarantee admission to the program. Admission to the program is determined by a careful case-by-case review of each applicant's credentials. Particular emphasis is given to the applicant's grade-point average during the junior and senior years of the undergraduate program, scores on the GRE, and statement of objectives.
A cumulative grade-point average of 3.00 or higher for the undergraduate program of study is preferred for admission on regular status. However, an applicant with a grade-point average below 3.00 may be admitted if other components of the application are especially strong.

## Requirements for the Master of Arts Degree in Interdisciplinary Studies in Social Science: Global Applications

The student must complete a total of 30 credits under Plan B in a program of study developed in consultation with the program coordinator and approved in advance by the Associate Dean. The student's program of study must ensure exposure to the concerns of labor and industrial relations, social work, and urban and regional planning and must include:

At least 21 credits in courses in the College of Social Science.
2. Core.
a. The following course

SW 821 Social Welfare Policy and Service
Delivery Systems
b. One of the following courses:

$$
\text { LIR } 824 \text { Human Resource Strategies and Decisions }
$$

c. One of the following courses:

UP 801 Concepts and Issues in Planning
and Development
3. Concentration: Six to 9 credits in one of the following three concentrations. A list of approved courses for each of the concentrations is available from the College.
Concentration A: Human Resource Development/Industrial Relations Concentration B: Comparative Human Service Programs
Concentration C: Urban and Regional Development
4. Guided Electives: Six to 9 credits in courses from the following departments within the College: Anthropology, Criminal Justice, Geography, Political Science, Psychology, and Sociology. With the approval of the Associate Dean, credits in courses that are administered by other academic units may be used to satisfy this requirement.
5. Field Experience: Three credits in an internship, practicum experience, or field experience while enrolled on the East Lansing campus. The related course must be approved in advance by the Associate Dean. A policy paper or report based on the field experience is required.
6. Additional Electives: Three credits in an additional internship, practicum, or field experience; in independent study; or in an experiential learning opportunity. The related course must be approved in advance by the Associate Dean.

## Academic Standards

Students are expected to maintain a minimum grade-point average of 3.00 each semester, in addition to maintaining a cumulative grade-point average of 3.00 .

## INTERDEPARTMENTAL GRADUATE SPECIALIZATIONS

## INTERDEPARTMENTAL GRADUATE SPECIALIZATIONS IN APPLIED DEVELOPMENTAL SCIENCE

The interdepartmental graduate specializations in applied developmental science are available as electives to students who are enrolled in the master's and doctoral degree programs in the departments of Agricultural and Extension Education; Agricultural Economics; Anthropology; Audiology and Speech Sciences; Communication; Counseling, Educational Psychology and Special Education; Crop and Soil Sciences; Educational Administration; Family and Child Ecology; Food Science and Human Nutrition; Geography; History; Kinesiology; Linguistics and Germanic, Slavic, Asian and African Languages; Marketing and Supply Chain Management; Political Science; Psychology; Community, Agriculture, Recreation and Resource Studies; Sociology; Statistics and Probability; Telecommunication, Information Studies and Media; and Zoology; in the master's and doctoral degree programs in the School of Music; in the Educational Specialist degree program in the Department of Counseling, Educational Psychology and Special Education; in the Master of Social Work degree programs in the School of Social Work; in the Master of Science in Nursing degree program in the College of Nursing; and in the graduate-professional degree program in the College of Human Medicine.

The College of Social Science administers the specializations. The specializations are supervised by an interdisciplinary faculty coordinating committee representing the graduate programs in-
volved. Students must meet the requirements of both the degree program and the specialization. Students should work closely with their academic advisers to ensure that meaningful experiences that are directly related to applied developmental science are included in their degree programs. With the approval of the department or school and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the student's degree program.
American society is faced with pervasive and burgeoning problems of individuals, families, and communities. Issues of child and youth development, of economic competitiveness, of environmental quality, and of health and health care require creative research and the design, deployment, and evaluation of innovative public policies and intervention programs. As a consequence, there has been increasing societal pressure for universities, and for the scholars within them, to design and deliver knowledge applications addressing these problems.

One of the most fruitful areas for such knowledge application involves examining the problems of individuals and communities across the life span. These applications require the ability to understand and assist the development of individuals who vary with respect to cultural and ethnic background, economic and social opportunity, physical and cognitive abilities, and conditions of living. Infants at biopsychosocial risk, gifted children or those with developmental disabilities, adolescents considering health-compromising behaviors, single- and dual-worker parents, the frail elderly, ethnic minorities, and impoverished families are just some of the populations requiring applications of knowledge based on the work of scholars in fields such as criminal justice, human nutrition, medicine, and psychology. There is a need within those fields for scholars who adopt a development perspective to their science.
The five components of applied developmental science are described below:

Developmental systems theory deals with the continuities and discontinuities of development, i.e., with the process of change. There is a temporal component to individual, family, institutional, and community experiences. Some aspects of development remain stable over time; other aspects change. Systems theory provides an approach to modeling stability and change, and to the identification of factors that causally influence organizational processes. The temporality of change has important implications for research design, service provision, and program evaluation because it is dependent upon use of longitudinal methods and keyed by multivariate models of the developmental process.

Competence in diversity involves issues related to diversity, whether that diversity is generated by culture, gender, age, socioeconomic status, handicappment, race or ethnicity, or community. All of those factors potentially affect individual differences among persons, families, communities, and neighborhoods and potentially contribute to program successes and failures. Competence in diversity refers to a set of academic and interpersonal skills that allow individuals to increase their understanding and appreciation of cultural differences and similarities within, among, and between groups.

Contextualism involves the centrality of context in terms of individuals, families, and family functioning. Context exists at all levels-biological, physical/ecological, social-cultural, political, economic, etc., and invites systemic approaches to research and program design and implementation. Contextual variables such as poverty, family size, birth order, single parenthood, supplemental child care, parental psychopathology, unemployment, and workplace stress all help to set the context within which individuals, families, and social groups behave and develop.
Asset building emphasizes identification of assets so that the capacity to act is strengthened at the most basic level possible,
whether that level is the individual person, or a local school, human service agency, neighborhood, or community. Applied developmental science stresses normative developmental processes as primary prevention rather than remediation. It rejects deficit model approaches to individual and social preven-tive-interventions. Universities exist to disseminate knowledge through instruction. From an applied developmental science perspective, asset building requires the learner (community) to be implicitly involved in the development of educational programs so that there is an explicit match between educational materials and needs of the consumer.

University-community partnerships stresses the principle that models for community intervention must be tested in the community setting in full collaboration with community partners. In short, communities must participate as full partners in the design and evaluation of community programs. From this perspective, application of knowledge generates new questions that demand generation of new knowledge (i.e., new approaches, new strategies, new program designs). The activities of applied developmental science span a continuum of knowledge generation to knowledge application which includes, but is not limited to, research on the applicability of scientific theory to human growth and development in ecologically valid contexts; the study of developmental correlates of phenomena of social import; the construction and utilization of developmentally and contextually sensitive assessment instruments; the design and evaluation of developmental interventions and enhancement programs; and the dissemination of developmental knowledge to individuals, families, communities, practitioners, and policymakers through developmental education, written materials, the mass media, expert testimony, and community collaborations.

All of these five components converge to a research environment that values longitudinal designs by which one can track individuals over time, assess normative trends, evaluate different contextual influences on intraindividual change as well as normative trends, and assess the dynamic bi-directional processes that regulate organization of individual, dyadic, family, and social systems.

The interdepartmental graduate specializations in applied developmental science are designed to provide a knowledge base that will facilitate the work of graduates who pursue careers in educational, agency, institutional, and governmental organizations that are integral to preventive-intervention programs, longitudinal studies of human development, and developmental evaluation. Specifically, the specializations are designed to:

1. Provide an opportunity for graduate students to obtain a comprehensive and contemporary academic experience in the field of applied developmental science.
2. Help graduate students with an interest in applied developmental science to become sensitive to their professional obligations and responsibilities.
3. Develop an intellectual environment that will foster the growth of research and teaching in the area of applied developmental science, as well as sensitize students to issues related to the rich diversity of human ethnic and racial populations, to social problems and social policy issues related to human development, and to the variety of contexts within which human development occurs.
4. Increase public awareness of the benefits of university-community partnerships to solve problems of social living and human development.
A student who is enrolled in one of the master's, Educational Specialist, doctoral, or graduate-professional degree programs referenced above and who wishes to complete the requirements for an Interdepartmental Graduate Specialization in Applied Developmental Science must petition the admission committee

SOCIAL SCIENCE
Interdepartmental Graduate Specializations in Applied Developmental Science
for the specialization for acceptance. To be considered for acceptance into the specialization, the student should have completed the Graduate Record Examination including the Subject Test in the student's discipline. To be accepted into the specialization, the student must have had academic preparation in experimental design and statistical analysis. If in the judgment of the coordinating committee the student's academic preparation is inadequate, the student may be required to complete some courses in addition to the courses that are used to satisfy the requirements for the specialization.

Although separate interdepartmental graduate specializations in applied developmental science have been developed for master's and doctoral students, a given student may receive certification of completion of either the specialization for master's students or the specialization for doctoral students, but not for both of the specializations. If a student has completed some of the requirements for the specialization that is available to master's students, but is subsequently admitted to a doctoral program and plans to complete the requirements for the specialization that is available to doctoral students, the requirements that the student has completed may be counted toward the requirements for the specialization that is available to doctoral students.

The student and the major professor select a guidance committee that will oversee the student's program of study for the specialization. In the event that a guidance committee has responsibility for overseeing a student's master's degree program, that same guidance committee may also oversee the student's program of study for the specialization, provided that the membership of the committee has been expanded to include at least one additional person who is a member of the applied developmental science faculty and who will represent that faculty on the committee. The same guidance committee that has responsibility for overseeing a student's Educational Specialist or doctoral degree program may also oversee the student's program of study for the specialization, provided that the membership of the committee has been expanded to include at least two additional persons who are members of the applied developmental science faculty and who will represent that faculty on the committee. For those students who are enrolled in master's degree programs that do not require that a guidance committee be established to oversee the student's program; for students who are enrolled in the graduate-professional degree program in the College of Human Medicine; and for master's, Educational Specialist, and doctoral students for whom guidance committees will be established for the sole purpose of overseeing programs of study for the specializations, the coordinator for applied developmental science will be responsible for establishing the students' guidance committees.

Students who are pursuing interdepartmental graduate specializations in applied developmental science are strongly encouraged to participate in twice monthly seminars with members of the applied developmental science faculty and other students who are pursuing the specializations. At those seminars, faculty and invited guests address issues related to design, methodology, statistical analysis of longitudinal data, evaluation, and techniques for building community-university research collaborations.

## Requirements for the Interdepartmental Graduate Specializations in Applied Developmental Science

## Master's Students

The student must:

1. Complete 18 credits of course work as specified below.
2. Complete a field research experience during at least one semester at an approved applied developmental science-community partnership site. This requirement may be met by
completing one or more courses that have been approved by the student's guidance committee or by completing an alternative experience approved by the coordinator for applied developmental science.
In addition to meeting the requirements referenced above, the thesis of a student on Plan A must reflect the integration of the student's discipline and applied developmental science.

## Doctoral Students

The student must:

1. Complete 18 credits of course work as specified below.
2. Complete a field research experience during at least one semester at an approved applied developmental science-community partnership site. This requirement may be met by completing one or more courses that have been approved by the student's guidance committee or by completing an alternative experience approved by the coordinator for applied developmental science.
3. Pass a written comprehensive examination in applied developmental science.
4. Complete a dissertation that reflects the integration of the student's discipline and applied developmental science.
Students who are enrolled in the Educational Specialist degree program in the Department of Counseling, Educational Psychology and Special Education and students who are enrolled in the graduate-professional degree program in the College of Human Medicine must meet the requirements for the specialization that are specified for master's students on Plan B.

## Required Core Courses

The courses that are used to satisfy the requirements for an Interdepartmental Graduate Specialization in Applied Developmental Science must be approved by the student's guidance committee for the specialization. The courses should be selected within the context of the student's educational and career goals and with the goal of demonstrating competence in developmental systems theory, research methods, and quantitative and qualitative analytic methods.

GROUP A: HUMAN DEVELOPMENT EMPHASIS
The courses listed below treat human development from a multidisciplinary perspective. The student must complete a minimum of three courses totaling at least 9 credits.

CREDITS
Human Development Focus

SOC 863 Community Theory and Research . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Assessment and Evaluation Focus
$\begin{array}{llll}\text { ASC } & 823 E & \text { Assessment of Childhood Language Disorders . . . . . . . . . . } \\ \text { FCE } & 822 & \text { Assessment of the Young Child }\end{array}$
$\begin{array}{lll}\text { FCE } & 822 & \text { Assessment of the Young Child ......................... } \\ \text { HNF } & 843 & \text { Community Nutritional Assessment }\end{array}$
PSY 818 Psychometric Theory and Test Construction . . . . . . . . . . . . . . . . . .
SW 892 Graduate Seminars in Social Work. . . . . . . . . . . . . . . . . . . . . . 3
Theory Focus
AEC 861 Agriculture in Economic Development . . . . . . . . . . . . . . . . . . 3
$\begin{array}{llll}\text { ANP } & 836 & \text { Theories of Sociocultural Change. . . . . . . . . . . . . . . . . . . . . . . . . } \\ \text { ANP } & 840 & \text { Biocultural Evolution }\end{array}$
ANP 840 Biocultural Evolution.
FCE 847 Theories of the Family
SOC 863 Community Theory and Research . . . . . . . . . . . . . . . . . . . . . . . . 3
Diversity and Context Focus
ANP 820 Language and Cultural Meaning. . . . . . . . . . . . . . . . . . . . . . . 4
$\begin{array}{llll}\text { ANP } & 832 & \text { Class and Ethnicity in Social Differentiation . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } & \end{array}$
ANP 839 Age and Gender . . . . . . . . . . . . .
COM 828 Cross-Cultural Communication
The Ghetto
Curriculum and Instruction in Adapted Physical
PLS 853 Education. ............................................... 3
Instruction in Adapted Physic............... 3
$\begin{array}{lll}\text { PLS } & 853 & \text { Political Economy of Development Policy. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . }\end{array}$
GROUP B: STATISTICAL AND METHODOLOGICAL EMPHASIS
The courses listed below treat methodology and statistics applicable to research in applied developmental science. The student must complete a minimum of three courses totaling at least 9 credits.
Multivariate Analysis
CEP 934 Multivariate Data Analysis I.
CEP 934 Multivariate Data Analysis I. . . . . . . . . . . . . . . . . . . . . . . . . . . 4
$\begin{array}{llll}\text { CEP } & 935 & \text { Advanced Topics in Multivariate Data Analysis II . . . . . . . . } \\ \text { MSC } & 907 & \text { Causal Modeling in Marketing . . . . . . . . . . . . . . . . . . }\end{array}$

| STT | 843 | Multivariate |
| :---: | :---: | :---: |
| STT | 841 | Linear Statistical Models |
| Qualitative Analysis |  |  |
| EPI | 810 | Introduction to Descriptive and Analytical Epidemiology |
| EPI | 812 | Causal Inference in Epidemiology |
| SOC | 985 | Qualitative Field Research |
| Family and Child Ecology 980 may be counted toward the requirements for the specialization only when the topic deals with qualitative research methods. |  |  |
| Systems Analysis |  |  |
| AEC | 810 | Institutional and Behavioral Economics |
| STT | 844 | Time Series Analysis |
| STT | 861 | Theory of Probability and Statistics I |
| STT | 862 | Theory of Probability and Statistics II |
| Survey and Field Methods |  |  |
| AEC | 874 | Field Data Collection and Analysis in Developing Countries |
| ANP | 829 | Research Methods in Cultural Anthropology |
| ANP | 833 | Ethnographic Analysis |
| CEP | 937 | Survey Research Methods in Education |
| SOC | 881 | Analysis of Social Data I. . |
| SOC | 882 | Analysis of Social Data II |
| SOC | 986 | Survey Research Principles |
| SW | 830 | Applied Social Work Research: Experimental and Quasi-Experimental Designs |
| SW | 831 | Applied Social Work Research: Design and Evaluation |
| SW | 832 | Applied Social Work Research: Survey and Field Designs |
| Research Methods |  |  |
| ASC | 803 | Research Methods in Communication Sciences and Disorders |
| CEP | 933 | Quantitative Methods in Educational Research II. |
| CEP | 939 | Seminar in Educational Measurement |
| COM | 801 | Communication Research I |
| COM | 802 | Communication Research II |
| COM | 902 | Communication Research Design II |
| GEO | 865 | Advanced Quantitative Methods in Geography |
| PLS | 801 | Quantitative Techniques in Public Policy and Political Science I |
| PLS | 802 | Quantitative Techniques in Public Policy and Political Science II. |
| PSY | 815 | Quantitative Research Design and Analysis in Psychology |
| PSY | 817 | Psychometric Methods |
| UP | 814 | Applied Research Methods for Planning and Development |

ANP 833 Research Methods in Cultural Anthropology
CEP 937 Survey Research Methods in Education
SOC 881 Analysis of Social Data I
SOC 882 Analysis of Social Data II
$\begin{array}{lll}\text { SOC } & 986 \\ \text { SW } & 830 & \text { Applied Social Work Research: Experimental and }\end{array}$
Quasi-Experimental Designs

CEP 933 Quantitative Methods in Educational Research II
CEP 939 Seminar in Educational Measurement
COM 801 Communication Research I
Communication Research II
COM 902 Communication Research Design II
GEO 865 Advanced Quantitative Methods in Geography
.... Science I
PLS 802 Quantitative Techniques in Public Policy and Political Science II.

UP 814 Applied Research Methods for Planning and
Upon completion of the requirements for the degree program and of the Interdepartmental Graduate Specialization in Applied Developmental Science, the student should contact the administrator of the department, school, or college in which he or she is enrolled and request certification for the completion of the specialization. After the certification is approved by the administrator of the department, school or college in which the student is enrolled and by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## GRADUATE SPECIALIZATION IN ENVIRONMENTAL SCIENCE AND POLICY

The Graduate Specialization in Environmental Science and Policy is available as an elective to students enrolled in doctoral degree programs in departments and programs emphasizing environmental science or policy. The goal of the specialization is to provide doctoral students with opportunities to develop cross-disciplinary literacy, learn to integrate information from diverse disciplines, and conduct analyses of environmental issues in ways that support better decision-making about environmental issues. The specialization encourages students to develop analytical skills that span both disciplines and spatial and temporal scales and equips them to communicate across disciplines. It prepares students to engage in research, teaching and service focused on complex environmental problems and to develop and disseminate sound analyses to improve environmental deci-sion-making.

Students who are interested in this specialization must contact an adviser for the Graduate Specialization in Environmental Science and Policy in the Environmental Science and Policy Pro-
gram. To be admitted to the specialization, a student must also be admitted to a doctoral program at Michigan State University.

With the approval of the department and college that administer the student's degree program, courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for a doctoral degree.

## Requirements for the Graduate Specialization in Environmental Science and Policy <br> Complete all the following courses ( 9 to 12 credits):

CREDITS

ESP 802 Human Systems and the Environment . . . . . . . . . . . . . . . . . . . . . .

ESP 804 Environmental Applications and Analysis. . . . . . . . . . . . . . 3
Students may apply to waive no more than 3 credits in Environmental Science and Policy 801,802 or 803 if they demonstrate competence in the materials covered by the course. Students should contact an adviser in the program to apply for a waiver. The topical focus of Environmental Science and Policy 804 will vary from year to year and students may enroll in it twice for credit.

Upon completion of the requirements for the Graduate Specialization in Environmental Science and Policy, the student should contact the Dean of the College of Social Science and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## GRADUATE SPECIALIZATION IN FOOD AND AGRICULTURAL STANDARDS

The Graduate Specialization in Food and Agricultural Standards is administered by the College of Agriculture and Natural Resources and the College of Social Science. The primary administrative unit for this specialization is the College of Social Science.

The Graduate Specialization in Food and Agricultural Standards is available as an elective for students who are enrolled in master's and doctoral programs at Michigan State University. This specialization is designed for graduate students who wish to explore connections among the political, ethical, strategic, and technical considerations presented by food and agricultural standards. Students enrolled in this specialization will develop their understanding of the relationships that connect science and technology to the creation, maintenance, and modification of agrifood standards; the ethical and value issues raised by standards in domestic and international agricultural production and marketing; the cultural and sociopolitical dynamics surrounding the development, maintenance, and change of agrifood standards; and the policy implications of global agrifood standards, including how the process of standards creation and implementation may be made more accountable, transparent, and democratic.

Students who are interested in the specialization must contact the adviser for the Graduate Specialization in Food and Agricultural Standards in the College of Social Science. To be admitted to the specialization, a student must have been admitted to a graduate program at Michigan State University. Each student's program of study must be approved by the adviser for the specialization. Students are not permitted to take all elective courses within their own discipline.

With the approval of the department and college that administer the student's degree program, courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for a master's or doctoral degree.

## Requirements for the Graduate Specialization in Food and Agricultural Standards

The student must complete a total of 15 credits. At least three courses or 9 credits must be in 800-level courses.

CREDITS

1. Complete the following course

SSC 820 Proseminar in Food and Agricultural Standards
2. Complete at least 3 credits from each of the following three areas

Regulatory Frameworks
ANR 811 U.S. Food Laws and Regulations
FSC 420 Quality Assurance
FSC 421 Food Laws and Regulations
FSC 490 Special Problems in Food Science
LIR 868 Employment Law.
SOC 890 Individual Readings.
Economic and Political Approaches
AEC 817 Political Economy of Agricultural and Trade Policy.
AEC 831 Food Marketing Management.
AEC 841 Analysis of Food System Organization and Performance
EC 840 International trade: Theory and Commercial Policy
GEO 415 Location Theory and Land Use Analysis.
PLS 902 Research Seminar in Evaluation Research
Human Dimensions and Social Perspectives
ANP 867 Social Impact Analysis
GEO 402 Agricultural Climatology
GEO 432 Environmental Ethics in Geography (W)
GEO 454 Spatial Aspects of Regional Development
HNF 406 Sociocultural Aspects of Food.
HRT 486 Biotechnology in Agriculture: Applications and Ethical Issues.
RD 444 Pesticides, People and Politics
SOC 861 Agricultural Structure and Change
SOC 868 Science and Technology.
VM 828 Food Safety Seminar Series.
VM 829 Problems in Food Safety.
3. Complete the following course:

SSC 891 Food and Agricultural Standards. . . . . . . . . . . . . . . . . . . 3
Upon completion of the requirements for the Graduate Specialization in Food and Agricultural Standards, the student should contact the Dean of the College of Social Science and request certification for the completion of the specialization. After the certification is approved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date it was completed. This certification will appear on the student's transcript.

## INTERDEPARTMENTAL GRADUATE SPECIALIZATION IN INFANT STUDIES

The Interdepartmental Graduate Specialization in Infant Studies are available as electives for students who are enrolled in the master's and doctoral degree programs in the departments of Anthropology, Audiology and Speech Sciences; Counseling, Educational Psychology and Special Education; Family and Child Ecology; Food Science and Human Nutrition; Kinesiology; Psychology; and Sociology, in the Educational Specialist degree program in the Department of Counseling, Educational Psychology and Special Education; in the Master of Social Work degree programs in the School of Social Work; in the Master of Science in Nursing degree program in the College of Nursing; and in the graduate-professional degree programs in the College of Human Medicine and the College of Osteopathic Medicine. The College of Social Science administers this specialization. Students who are enrolled in the Educational Specialist degree program in the Department of Counseling, Educational Psychology and Special Education and students who are enrolled in the graduate-professional degree programs in the College of Human Medicine and the College of Osteopathic Medicine must meet the requirements for the specialization that are specified for master's students on Plan B.
The quality of life during the first three years of human development provides the foundation upon which all subsequent development is built. As a result of advances in biomedical technology, social-cultural conditions, and legislation, increasing attention is being directed toward the optimal development of infants and their families.

Research, clinical service, and educational programming directed at children during the first three years of life and their families require knowledge from many disciplines as well as opportunities to integrate this knowledge within a formal educational setting. The specialization is based on the philosophy that a transdisciplinary educational program is the appropriate preparatory experience for personnel who will work with infants and their families. The specialization is designed to provide a knowledge base that will facilitate the work of graduates who pursue careers in agencies, institutions, and government organizations that offer services to infants and their families, and who pursue careers in teaching and research relevant to the needs of infants and their families.

Persons who have been identified by the chairpersons, directors, and deans of the 12 participating academic units are members of the Infant Studies voting core faculty or associated faculty. The Coordinating Committee of the Infant Studies faculty is drawn from the core faculty and is appointed by the Dean of the College of Social Science. The faculty members who comprise the core faculty and associated faculty may change with the mutual consent of the administrators of the participating units upon recommendation of the Coordinating Committee. The chairperson of the Coordinating Committee is appointed by the Dean of the College of Social Science.

The Interdepartmental Graduate Specialization in Infant Studies are designed to:

1. Provide an opportunity for graduate students to obtain a comprehensive and contemporary academic experience in the field of human infancy.
2. Help graduate students with an interest in human infancy to become sensitive to their professional obligations and responsibilities.
3. Develop an intellectual environment that will foster the growth of research and teaching in the area of human infancy, as well as sensitize students to clinical, educational, and social policy issues related to early human development.
4. Increase public awareness of the critical importance of the early years of human development.
A student who is enrolled in a master's, Educational Specialist, doctoral, or graduate-professional degree program in one of the 12 participating academic units and who wishes to complete the requirements for an Interdepartmental Graduate Specialization in Infant Studies must petition the Coordinating Committee for acceptance into the specialization. Students who wish to pursue the specialization should have a minimum grade-point average of 3.00 and should have taken the Graduate Record Examination (or its equivalent), including any Subject Test required by the student's academic unit.

To be accepted into the specialization, students must have been admitted to one of the degree programs referenced above and must have had preparation in experimental design and statistical analysis. If in the judgement of the Coordinating Committee additional academic preparation is appropriate, the student may be required to complete some collateral courses.

## Requirements for the Specialization in Infant Studies

Although separate interdepartmental graduate specializations in infant studies have been developed for master's and doctoral students, a given student may receive certification of completion of either the specialization for master's students or the specialization for doctoral students, but not for both of the specializations. If a student has completed some of the requirements for the specialization that is available to master's students, but is subsequently admitted to a doctoral program and plans to complete the requirements for the specialization that is available to doctoral
students, the requirements that the student has completed may be counted toward the requirements for the specialization that is available to doctoral students.
The student and the major professor select a guidance committee that will oversee the student's program of study for the specialization. In the event that a guidance committee has responsibility for overseeing a student's master's degree program, that same guidance committee may also oversee the student's program of study for the specialization, provided that the membership of the committee has been expanded to include at least one additional person who is a member of the Coordinating Committee of the Infant Studies faculty and who will represent the Infant Studies faculty on the committee. The same guidance committee that has responsibility for overseeing a student's Educational Specialist or doctoral degree program may also oversee the student's program of study for the specialization, provided that the membership of the committee has been expanded to include at least two additional persons who are members of the Coordinating Committee of the Infant Studies faculty and who will represent the Infant Studies faculty on the committee. For those students who are enrolled in master's degree programs that do not require that a guidance committee be established to oversee the student's program; for students who are enrolled in the graduate-professional degree programs in the College of Human Medicine and the College of Osteopathic Medicine; and for master's, Educational Specialist, and doctoral students for whom guidance committees will be established for the sole purpose of overseeing programs of study for the specialization, the Chairperson of the Coordinating Committee will be responsible for establishing the students' guidance committees.
Students should work closely with their advisers within their academic units to develop meaningful experiences that are directly related to infant studies. Credits that are used to meet the requirements for the specialization may also be counted toward the requirements for the student's degree program at the discretion of the academic unit in which the student is enrolled.

Students who are pursuing the Interdepartmental Graduate Specialization in Infant Studies are strongly encouraged to participate in twice monthly seminars with members of the Coordinating Committee and other students who are pursuing the specialization.
Students who are enrolled in the Educational Specialist degree program in the Department of Counseling, Educational Psychology and Special Education and students who are enrolled in the graduate-professional degree programs in the College of Human Medicine and the College of Osteopathic Medicine must meet the requirements for the specialization that are specified for master's students on Plan B.

## Master's Students

The student must:

1. Complete 18 credits of course work as specified below.
2. Participate in a field experience that involves direct contact with infants. This requirement may be met by completing one or more courses that have been approved by the student's guidance committee or by completing an alternative experience approved by the Coordinating Committee of the Infant Studies faculty.
In addition to meeting the requirements referenced above, students on Plan A (with thesis) must complete a thesis that reflects the integration of the student's discipline and infant studies.

## Doctoral Students

## The student must:

1. Complete 18 credits of course work as specified below.
2. Participate in a field experience that involves direct contact with infants. This requirement may be met by completing one
or more courses that have been approved by the student's guidance committee or by completing an alternative experience approved by the Coordinating Committee of the Infant Studies faculty.
3. Pass a written comprehensive examination.
4. Complete a dissertation that reflects the integration of the student's discipline and infant studies.

## Required Core Courses

Group A: A minimum of 12 credits from the following courses:


Counseling, Educational Psychology and Special Education 894B, 894D,
and 982 , Nursing 522 and 524 , Kinesiology $890,893,894$, and 990 may be
counted toward the requirements for the specialization only when the topic deals with infant studies.

Upon completion of the requirements for the degree program and of the Interdepartmental Graduate Specialization in Infant Studies, the student should contact the administrator of the department, school, or college in which he or she is enrolled and request certification for the completion of the specialization. After the certification is approved by the administrator of the department, school, or college in which the student is enrolled and by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## GRADUATE SPECIALIZATION IN INTERNATIONAL DEVELOPMENT

The Graduate Specialization in International Development are available as electives for students who are enrolled in master's and doctoral degree programs at Michigan State University. The College of Social Science administers the specialization. The graduate academic adviser for international development, located in the College, coordinates the specialization on behalf of the Dean.

The Specialization in International Development is designed to:

1. Provide an opportunity for graduate students to obtain a comprehensive and contemporary academic experience in the field of international development studies.
2. Sensitize graduate students with an interest in development studies to their professional obligations and responsibilities.

SOCIAL SCIENCE
Graduate Specialization in International Development
3. Develop an intellectual environment that will foster the growth of research and teaching in the area of development studies.
The graduate academic adviser for international development in the College of Social Science is responsible for establishing a guidance committee for the specialization for each student. With the approval of the graduate academic adviser for international development in the College of Social Science, a guidance committee that has responsibility for overseeing a student's master's or doctoral degree program will normally oversee the student's program of study for the specialization. At least one member of the committee must be a member of the international development core faculty who will serve as the student's academic adviser for the specialization.
Students who elect the specialization may be required to study the foreign language most relevant to their educational and career objectives, to acquire practical experience in development work, and to complete courses in addition to the courses that are used to satisfy the requirements for the specialization.
Although separate graduate specializations in international development have been established for master's and doctoral students, a given student may receive certification of completion of either the specialization for master's students or the specialization for doctoral students, but not for both of the specializations.
With the approval of the department or school and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the degree.

## Requirements for the Graduate Specialization in International Development

The student must complete a concentration within international development such as gender and health, gender and work, rural development, environment and development, development administration, nongovernmental organizations in development, or politics of development. Any course that was used to satisfy the requirements for the undergraduate Specialization in International Development may not be used to satisfy the requirements for the Graduate Specialization in International Development. The student's program of study must be approved by the student's guidance committee for the specialization and must meet the requirements specified below:

CREDITS
Master's Student: The student must complete 12 credits as outlined below. At least half of the credits must come from outside the student's major.
(1) Complete two of the Core Courses listed below. Only one of the courses may be at the 400 level.
(2) Complete at least two additional courses, of at least 3 credits each, which are relevant to the student's concentration within international development
Doctoral Student: The student must complete 18 credits as outlined below:
(1) Complete two of the Core Courses listed below. Only one of the courses may be at the 400 level.
(2) Complete at least four additional courses, of at least 3 credits each, which are relevant to the student's concentration within international development.
(3) Pass a written comprehensive examination on the student's concentration within international development. With the approval of the department or school and college that administer the student's degree program, this examination may be incorporated into the comprehensive examinations that are required for the degree.
Core Courses:

| AEC | 861 | Agriculture in Economic Development | 3 |
| :---: | :---: | :---: | :---: |
| ANP | 867 | Archaeological Theory | 3 |
| EC | 410 | Issues in the Economics of Developing Countries | 3 |
| GEO | 454 | Spatial Aspects of Regional Development | 3 |
| PLS | 853 | Political Economy of Development Policy. | 3 |
| RD | 826 | International Development and Sustainability. | 3 |
| SOC | 832 | International Inequality and Development | 3 |
| WS | 403 | Women and Change in Developing Countries | 3 |

Upon completion of the requirements for the Graduate Specialization in International Development, the student should contact the graduate academic adviser for international development in the College of Social Science and request certification for the completion of the specialization. After the certification is ap-
proved by the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## INTERDEPARTMENTAL GRADUATE SPECIALIZATION IN COGNITIVE SCIENCE

The Interdepartmental Graduate Specialization in Cognitive Science are available for students who are enrolled in master's and doctoral degree programs in Audiology and Speech Sciences; Computer Science; Ecology, Evolutionary Biology and Behavior; Geography; Linguistics and Germanic, Slavic, Asian and African Languages; Neuroscience; Philosophy; Physics and Astronomy; Physiology; Psychiatry; Psychology; Telecommunication; and Zoology. The College of Social Science administers the specialization.

One of the most important remaining mysteries in science is the nature of mind, whether mind be embodied in the neurons of the brain or in the silicon stuff of computer chips in an artificial brain-like system. Cognitive Science explores how biological systems process information to produce thought and adaptive behavior and whether artificial systems can be endowed with the same capabilities. The scientific study of the nature of mind requires a concerted effort by investigators from many different theoretical perspectives, empirical traditions, and academic disciplines. The program will make available to students an interdisciplinary field that encompasses approaches to solving the problems of understanding the mind from a number of sharply different directions. Students will learn about, and engage in, research on these problems under more than one disciplinary umbrella. The specialization is supervised by the Cognitive Science Graduate Affairs Committee.

Students seeking admission to the specialization must contact the Director of the Cognitive Science Program. To be admitted, a student must have completed a bachelor's degree with a grade-point average of at least 3.0 and have been admitted to a master's or doctoral program in one of the participating departments. Students should submit a cover letter and a personal statement describing their interest in cognitive science and their objectives in seeking admission. Additional documentation may be requested.

## Requirements for the Specialization in Cognitive Science

The Specialization in Cognitive Science is offered at both the master's and the doctoral level. No student may receive certification at both levels. During the first year of the master's or doctoral program, the student and the major professor select a guidance committee to assist in planning both the student's degree program and specialization. At least one member of a master's student's guidance committee and two members of a doctoral student's guidance committee shall be members of the Cognitive Science faculty, with one of the latter from a discipline outside the student's major department.

Credits that are used to meet the requirements of the specialization may also be used to satisfy the requirements for the student's major at the discretion of the department or college. Courses that are used to satisfy the requirements for the specialization must be approved by the student's guidance committee and should demonstrate competence in at least two areas of cognitive science.

Master's Students must:

1. Complete 18 credits of course work as specified below.
2. Participate in a research project outside their major department, either by completing one semester of work in a labora-
tory project or by enrolling in an independent study course involving collaborative work with a member of the cognitive science faculty.
Plan A students will also complete a thesis reflecting the integration of the student's discipline and Cognitive Science.

## Doctoral Students must:

1. Complete 18 credits or course work as specified below.
2. Participate in a research project outside their major department, either by completing one semester of work in a laboratory project or by enrolling in an independent study course involving collaborative work with a member of the cognitive science faculty.
3. Complete a dissertation that reflects the integration of the student's discipline and Cognitive Science.
Required Core Courses
PSY 863 Seminar in Cognitive Science.
At least 16 additional credits in courses relevant to Cognitive Science.
At least 6 of these credits, chosen from the following, must be in courses
outside the student's major.
ASC 813 Neuroanatomy and Neurophysiology of Speech,
Language, and Hearing.

## ASC 823A Acquired Language Disorders

ASC 914A Speech Production and Perception
ASC 914B Speech Production and Perception II.
CSE 802 Pattern Recognition and Analysis
CSE 803 Computer Vision
CSE 841 Artificial Intelligence
CSE 845 Knowledge-Based Systems
CSE 847 Machine Learning
CSE 848 Evolutionary Computation.
CSE 885 Artificial Neural Networks
CSE 941 Selected Topics in Artificial Intelligence
LIN 824 Phonological Theory I.
LIN 834 Syntactic Theory I.
LIN 837 Advanced Studies in Semantics and Pragmatics
LIN 850 Advanced Studies in Child Language Acquisition
PHL 860 Seminar in Metaphysics and Epistemology
PHL 880 Seminar in Philosophy of Science
PSY 801 Sensation and Perception.
PSY 802 Basic Cognitive Processes
PSY 803 Higher Order Cognitive Processes
PSY 814 Psycholinguistics
PSY 851 Neuropsychology
ZOL 822 Topics in Ethology and Behavioral Ecology
Other course may ate Affairs Committee.

Upon completion of the requirements for the degree program and of the Interdepartmental Graduate Specialization in Cognitive Science, the student should contact the administrator of the department, school, or college in which he or she is enrolled and request certification for the completion of the specialization. After the certification is approved by the Cognitive Science Graduate Affairs Committee, the Director of the program, and the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcripts.

## DEPARTMENT of <br> ANTHROPOLOGY

## Lynne G. Goldstein, Chairperson

Anthropology takes humans and their cultures, throughout the world and through the entirety of human history, as its central object of study. This field gives students a framework for understanding their place in the natural world. It examines humanity's evolutionary background and development, the organization of social and cultural life, the nature of culture as a system of meaning to organize and interpret experience, the evolution of societies, and the interrelationships between culture and shared ways of thinking and feeling.

Major points of orientation within anthropology include the search for patterning of cultural behavior amidst the immense variation found within and among cultures, the study of principles of cultural dynamics, the analysis of processes of change and stability within social and cultural structures, cross-cultural comparisons of different societies, the study of patterns of development of societies from simple to complex, and the functioning of cultural institutions as parts of overall sociocultural systems.

Anthropology views the world of humanity's many cultures as a natural laboratory in which a multitude of varied historical adaptations have developed and are continuing to evolve, the study of which can help in the understanding of human behavior and the course of history. Providing an excellent foundation for a diverse, liberal education, the study of anthropology also contributes to the preparation of students for careers in education, medicine, business and industry, government service, and other walks of life in which a broad knowledge of cultural dynamics, ethnic diversity and human relations is important.

The department has signature programs in culture, resources and power; great lakes anthropology; medical anthropology; and forensic anthropology and bioarchaeology. Visit http://www.ssc.msu.edu/~anp/.

## UNDERGRADUATE PROGRAM

## Requirements for the Bachelor of Arts Degree in Anthropology

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor or Arts degree in Anthropology.

The University's Tier II writing requirement for the Anthropology major is met by completing Anthropology 489. That course is referenced in item 3. a. below.
2. The requirements of the College of Social Science for the Bachelor of Arts degree. CREDITS
3. The following required major courses: . . . . . . . . . . . . . . . . . . . . . . . . . . . 30
a. All of the following courses:

ANP 201 Sociocultural Diversity . . . . . . . . . . . . . . . . . . . . . . 3 ANP 202 Biocultural Evolution 3
3 ANP 489 Anthropology Capstone Course (W) . . . . . . . . . . 3
b. One area course from Anthropology 410, 411, 412, 414, 415, 416, 432, 433, 434, 450, 451, 452, 453.
c. One topical/analytical course from Anthropology 203, 320, 321, 322, 330, 340, 361, 363, 370, 420, 422, 423, 424, 426, 428, 430, 431, 440, 441, 442, 460, 461, 462, 470, 480.
d. One anthropological methods course selected from Anthropology 429, 441, 463, and 464.
e. Four additional Anthropology courses, at least three of which must be at the 300-400 level. Anthropology 101 may not be used to meet this requirement.

## Requirements for the Bachelor of Science Degree in Anthropology

1. The University requirements for the bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Anthropology.

The completion of Statistics and Probability 200, 201, or 421, referenced in item 3. f. below may also satisfy the University mathematics requirement or the College of Social Science NATURAL SCIENCE REQUIREMENT, but not both.

The University's Tier II writing requirement for the Anthropology major is met by completing Anthropology 489. That course is referenced in item 3. a. below.
2. The College of Social Science requirements for the Bachelor of Science degree. The College's NATURAL SCIENCE REQUIREMENT for the Anthropology major is met by completing 15 additional credits in courses offered by a department or program in the College of Natural Science, chosen from at least two of the following: Biochemistry and Molecular Biology, Biological Science, Chemistry, Entomology, Geological Sciences, Mathematics, Microbiology and Molecular Genetics, Physics and Astronomy, Plant Biology, Plant Pathology, Physiology, Statistics and Probability, and Zoology. Relevant natural science courses offered through any other College may be taken with the approval of the student's academic adviser.
3. The following requirements for the major:
a. All of the following courses:
$\begin{array}{lll}\text { ANP } & 201 & \text { Sociocultural Diversity . . . . . . . . . . . . . . . . . . . . . . . } 3 \\ \text { ANP } & 202 & \text { Biocultural Evolution . . . . . . . . . . . . . . . . . } 3\end{array}$
ANP 489 Anthropology Capstone Course (W) . . . . . . . . . . . . . . . 3
b. One area course from Anthropology 410, 411, 412, 414, 415, 416,

432, 433, 434, 450, 451, 452, 453.
c. One topical/analytical course from Anthropology 203, 320, 321, 322, 330, 340, 361, 363, 370, 420, 422, 423, 424, 426, 428, 430, 431, 440, 441, 442, 460, 461, 462, 470, 480.
d. One anthropological methods course selected from Anthropology 429, 441, 463, 464.
e. Four additional Anthropology courses, at least three of which must be at the 300-400 level. Anthropology 101 may not be used to meet this requirement.
f. One statistics and probability course selected from STT 200, 201, 421; or PSY 295.

## TEACHER CERTIFICATION OPTIONS

An anthropology disciplinary minor is available for teacher certification.
Students who elect the anthropology disciplinary minor must contact the Department of Anthropology.
For additional information, refer to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

## GRADUATE STUDY

The Department of Anthropology offers programs of study leading to the Master of Arts and Doctor of Philosophy degrees.
Anthropology majors are encouraged, with the consent of their guidance committees, to complete a cognate in a field outside the department. Similarly, the department offers a cognate in anthropology to individuals with majors in other disciplines.
The Department of Anthropology is affiliated with the Doctor of Philosophy degree program with a major in ecology, evolutionary biology and behavior. For information about a Doctor of Philosophy degree program that involves ecology, evolutionary biology and behavior and a major in the Department of Anthropology, refer to the statement on the doctoral program in ecology, evolutionary biology and behavior in the College of Natural Science section of this catalog.

Students who are enrolled in the Master of Arts degree program in the Department of Anthropology may elect a Specialization in Ecology, Evolutionary Biology and Behavior. For additional information, refer to the statement on the specialization in the College of Natural Science section of this catalog.

Students who are enrolled in Master of Arts and Doctor of Philosophy degree programs in the Department of Anthropology may elect specializations in infant studies. For additional information, refer to the statement on Interdepartmental Graduate Specializations in Infant Studies.

## Master of Arts

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

Students applying for admission to the master's program in anthropology will be considered regardless of the field of their previous academic training. It is, however, recommended that students have earned at least 12 undergraduate credits in anthropology before entering the program. Admission on other than a provisional status is normally contingent upon the possession of a bachelor's degree from a recognized college or university, and a junior-senior undergraduate grade-point average of 3.00 or better in academic studies.

## Requirements for the Master of Arts Degree for Students Who Are Enrolled in the Master of Arts Degree Program with a Major in Anthropology

Students who are enrolled in the Master of Arts degree program with a major in Anthropology must complete 30 credits under Plan A (with thesis). The Plan B option is available only to students who are enrolled in the Doctor of Philosophy degree program with a major in Anthropology and who wish to meet the requirements for the Master of Arts degree as part of the Doctor of Philosophy degree program. Normally students complete the requirements for the Master of Arts degree in three to four years.

Plan A requirements include:

1. A minimum of four anthropological foundation courses as specified by the department according to the student's subdiscipline.
2. Anthropology 840.
3. A methods course in anthropology or a substitute approved by the student's guidance committee.

## Requirements for the Master of Arts Degree for Students Who Are Enrolled in the Doctor of Philosophy Degree Program with a Major in Anthropology

Students who are enrolled in the Doctor of Philosophy degree program with a major in Anthropology and who wish to meet the requirements for a Master of Arts degree with a major in Anthropology as part of the Doctor of Philosophy degree program must complete 30 credits under Plan B (without thesis). The Plan B option is available only to students who are admitted to the Doctor of Philosophy degree program with a major in Anthropology. Normally students meet the requirements for the Master of Arts degree during the third year of study in the doctoral program.

Plan B requirements include:

1. A minimum of 4 anthropological foundation courses as specified by the department according to the student's subdiscipline.
2. Anthropology 840.
3. A methods course in anthropology or a substitute approved by the student's guidance committee.
4. Completion of all additional required courses to a minimum of 30 credits as specified by the guidance committee.
5. Pass the doctoral evaluation procedure at the end of both the first and second years in residence.
6. Satisfactorily complete the Ph.D. comprehensive examination administered by the student's guidance committee and approved by the faculty.

## Doctor of Philosophy

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

A master's degree is not a prerequisite for admission to the doctoral program in anthropology. Students who wish to transfer into the doctoral degree program from the master's degree program must compete the regular application procedure for admission to the doctoral program.

## Requirements for the Doctor of Philosophy Degree in Anthropology

1. Complete five anthropological foundation courses chosen from a departmentally approved list in consultation with the guidance committee. The courses are designed to provide a strong postgraduate foundation in anthropology's subdisciplines, as well as to serve students' individual needs. The courses must be distributed in accordance with the student's subdisciplinary focus and must be completed before the comprehensive examination.
2. Complete Anthropology 840.
3. Complete at least one methods course as specified by the department in accordance with the student's subdisciplinary focus.
4. Pass the doctoral evaluation procedure at the end of both the first and second years in residence.
5. Complete a flexible program of elective study related to the student's special areas of interest.

## 6. Complete an original field research program as the basis for a dissertation.

## Academic Standards

The student's performance in courses during both the first and second academic years of residence is evaluated to determine the student's ability to proceed with the doctoral program. Passing the doctoral evaluation procedure at the end of the second year in residence qualifies the student to proceed with the doctoral program.

## PROFESSIONAL APPLICATIONS IN ANTHROPOLOGY

## Master of Arts

The Master of Arts in Professional Applications in Anthropology will allow students to select a flexible but highly focused plan of study to prepare for positions as practicing anthropologists in government or the private sector. In addition to specialized training within the field of anthropology, students will be expected to elect courses in a field related to the practice of anthropology such as geographical information systems (GIS), cartography, resource development, management of nonprofit organizations, museum studies, or another practice-oriented specialty that is approved by the student's guidance committee. Students will also obtain experience as practicing professionals.
This program includes three areas of professional development: (1) in-depth knowledge of the discipline of anthropology; (2) demonstrated command of communication and presentation skills, as shown in the writing and public presentation of a master's paper; (3) demonstrated practical experience, obtained either as part of past employment, or as an internship within the public or private sector.
In addition to meeting the requirements of the University and the College of Social Science, students must meet the requirements specified below.

## Admission

Students applying for admission to the master's program in professional applications in anthropology will be considered regardless of the field of their previous academic training. It is, however, recommended that students have earned at least 12 undergraduate credits in anthropology before entering the program. Admission on other than a provisional status is normally contingent upon the possession of a bachelor's degree from a recognized college or university, and a junior-senior undergraduate grade-point average of 3.00 or better in academic studies.

## Requirements for the Master of Arts Degree in Professional Applications in Anthropology

Students who are enrolled in the Master of Arts degree program with a major in Professional Applications in Anthropology must complete a minimum of 30 credits, 15 which must be earned in anthropology, under Plan B (without thesis). The student's program of study must be approved by the student's guidance committee. Normally students complete the requirements for the Master of Arts degree in two years.
The student must meet the following requirements:

1. Completion of Anthropology 840, 855, and 901.
2. A methods course in anthropology.
3. Completion of additional courses in anthropology and other disciplines.
4. Satisfactory completion and presentation of a master's paper, which is submitted to the Department.
5. Completion of an approved internship, Anthropology 900, unless this requirement is specifically waived by the student's guidance committee.

## RESEARCH OPPORTUNITIES

The African, Asian, and Latin American Studies Centers offer unique opportunities for the support of anthropological research. The University Museum, International Studies and Programs, the Center for Advanced Studies in International Development (CASID), the Office of Women in Development (WID), the Agricultural Experiment Station, Urban Affairs Programs, the Hispanic Research Institute, and the Midwest Universities Consortium for International Activities, Incorporated (MUCIA), also support research. A program of study may be developed in cooperation with the College of Human Medicine.

## SCHOOL of CRIMINAL JUSTICE

## Edmund F. McGarrell, Director

Free and democratic society requires a commitment to safety and security as well as to core values of justice, equity, and civil liberty. Indeed, the appropriate balance of security and liberty is an ongoing challenge of free societies. Public and private agencies at various levels provide for security, safety, justice, and freedom through efforts to prevent crime and to appropriately respond to crime when it does occur.

The academic study of criminal justice through the Bachelor of Arts, Master of Science, and Doctor of Philosophy degree programs in the School of Criminal Justice is based on the belief that the study of the causes of crime and delinquency must be combined with the study of the institutions and processes involved in the prevention and response to crime and delinquency. Additionally, the systematic study of crime, criminal behavior, and criminal justice and security processes should be informed by multidisciplinary theory and research. The challenges posed by crime and security in contemporary society necessitate well-educated professionals prepared for careers in criminal justice, security, and related areas.

The School of Criminal Justice offers undergraduate and graduate specializations in security management, a graduate specialization in judicial administration, a Master of Science degree in Forensic Science, and a Doctor of Philosophy degree in Criminal Justice.

## UNDERGRADUATE PROGRAMS

## Bachelor of Arts

## CRIMINAL JUSTICE

The Bachelor of Arts degree program in criminal justice is designed to prepare students for entry level positions in public and private agencies identified with criminal justice administration. Such agencies apprehend offenders, adjudicate alleged offenses, redirect emergent criminal careers, and promote industrial and commercial security. Such agencies also encourage and

SOCIAL SCIENCE

## School of Criminal Justice

emphasize community responsibility for the success of their programs.
The bachelor's program in criminal justice provides a basic orientation to the institutions and processes of criminal justice and offers students wide exposure to all of the major disciplines of the criminal justice system. The program promotes general knowledge through core and social science courses. It provides students with the opportunity to pursue interests in the following areas: juvenile justice, police administration, adult corrections, and security.

## Requirements for the Bachelor of Arts Degree in Criminal Justice

1. The requirements of the University as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Criminal Justice
The University's Tier II writing requirement for the Criminal Justice major is met by completing one of the following courses: Criminal Justice 434, 456, 466, or 485. Those courses are referenced in item 3. a. (3) below.
2. The requirements of the College of Social Science for the Bachelor of Arts degree.
3. The following requirements for the major:
a. The following courses in the School Criminal Justice: .... CREDITS
(1) All of the following Prerequisite Courses (12 credits):

| CJ | 110 | Introduction to Criminal Justice . . . . . . . . . . . . 4 |
| :--- | :--- | :--- | :--- |
| CJ | 220 | Criminology . . . . . . . . . . . . . . . . . . . . . 4 |
| CJ | 292 | Methods of Criminal Justice Research |

(2) All of the following Core Courses (15 or 16 credits):

CJ 335 Police Process . . . . . . . . . . . . . . . . . . . . . . . 4
CJ 365 Corrections Process . . . . . . . . . . . . . . . . . . . . . 4
CJ 375 Criminal Law Process One of the following courses.
CJ 355 Juvenile Justice Process.
CJ 385 Introduction to Private Security . . . . . . . . . . . . . . . . 4
(3) A minimum of 12 credits from the following courses including 3 credits in Criminal Justice 434, 456, 466, or 485 :
CJ 210 Introduction to Forensic Science. . . . . . . . . . . . 4
CJ 385 Introduction to Private Security . . . . . . . . . . . . 3
CJ 400 H Honors Study. . . . . . . . . . . . . . . . . . . . 3

CJ 421 Minorities, Crime, and Social Policy . . . . . . . . 3
CJ 422 Comparative and Historical Criminal Justice.
CJ 425 Women and Criminal Justice ..................... 3 .3
.3

432 Community Policing. . . . . . . . . . . . . . . . . . . . . . 3
433 Law Enforcement Intelligence Operations. . . . 3
434
435
Police Administration (W) . . . . . . . . . . . . . . . . . . 3
3
435 Investigative Procedures.
455 Delinquency and Treatment Approaches
456 Criminal Careers and Career Criminals (W) . . 3
465 Correctional Programming and Analysis
466 Corrections Organizations and Systems (W) . 3
471 Law of Corrections
474 Law and Criminal Justice Policy
485 Asset Protection Management (W) .. . . . . . . . . 4
485 Asset Protection Management (W) . . . . . . . . 3
490 Independent Study ............. . . . . . . . . . . . . 1 to 3
491 Topics in Criminal Justice . . . . . . . . . . . . . . . . 2 to 4

## UNDERGRADUATE SPECIALIZATION IN SECURITY MANAGEMENT

The complexities of modern society have combined to generate a variety of threats to business organizations, information networks, government installations and operations, and individuals. The Undergraduate Specialization in Security Management is designed for students who are interested in private and government security.
The specialization, which is administered by the School of Criminal Justice, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. The specialization should be of particular interest to students who are enrolled in certain programs in the Eli Broad College of Business and the College of Social Science, and to students who are enrolled in the Bachelor of Science degree program in computer science.

The Specialization in Security Management is designed to help students to understand:

1. The business and technical aspects of protecting private and government assets.
2. The administrative, management, technical, and legal problems of asset protection and loss prevention.
3. Concepts related to protecting personal and personnel rights, proprietary information, facilities, and other assets of an organization.
4. Security's relationship to the value of freedom and democratic principles in our society.
With the approval of the department or school and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree.

## Requirements for the Undergraduate Specialization in Security Management

The student must complete:
CREDITS

1. All of the following courses ( 18 credits):

ACC 230 Survey of Accounting Concepts ......................... 3
CJ 385 Introduction to Private Security .......................... 3
CJ 433 Law Enforcement Intelligence Operations
CJ 435 Investigation Procedures
CJ 485 Asset Protection Management (W).
CJ 494 Criminal Justice Practicum
2. One of the following courses ( 3 or 4 credits):

CSE 101 Computing Concepts and Competencies ..............
CSE 231 Introduction to Programming I.
3. One of the following courses ( 3 credits):

FI 320 Introduction to Finance .
GBL 323 Introduction to Business Law
MGT 325 Management Skills and Processes.
MSC 327 Introduction to Marketing.3
3
3

Upon completion of the requirements for the Specialization in Security Management, the student should contact the Director of the School of Criminal Justice and request certification for the completion of the specialization. After the certification is approved by the Director of the School and the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## GRADUATE STUDY

The School of Criminal Justice is at the forefront of education in the nature of crime, administration of criminal justice, security management and administration, and the legal system.
Throughout the program there is an emphasis on the relationship between theory and practice as well as the interconnection of the activities of the many agencies and professions involved in the systems of justice and private security. Through their research, teaching, and practice, graduates can contribute to the development of improved systems for the prevention and control of crime and delinquency.

The School of Criminal Justice offers a professionally and managerially oriented Master of Science degree program for advanced students, many of whom are criminal justice professionals. The Master of Science degree is offered both on campus and through online delivery. The Master of Science in forensics offers programs in forensic biology and chemistry.

The Doctor of Philosophy is designed to produce graduates who can apply interdisciplinary theory and a variety of research methodologies to the study of crime causation, social reaction, and the legal system. The Ph.D. in Criminal Justice permits students to emphasize the study of crime, crime control, and justice administration while simultaneously developing a strong foundation in social science theory and research methods. It prepares students for careers in college and university teaching and research, as well as for advanced public-policy positions.

The school also offers a graduate Specialization in Security Management and in Judicial Administration; and a Master of Science in Forensic Science.

## Master of Science

## CRIMINAL JUSTICE

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

While a criminal justice undergraduate major comparable to that offered by this school is not required for admission to the Master of Science degree program, the applicant must have a background of education and occupational experience appropriate to the successful pursuit of graduate work in the concentration elected. Applicants insufficiently prepared for graduate study in criminal justice may have to complete collateral course work or pursue individualized study to satisfy deficiencies. Occupational experience is highly desirable before undertaking graduate study in some fields of criminal justice.

All applicants must have at least 12 credits of undergraduate course work in political science, economics, sociology, psychology, anthropology, history, social work, or any combination thereof. At least 6 of these credits must be in sociology, psychology, social work, or any combination of such courses.

## Regular Status

1. A bachelor's degree from a recognized educational institution.
2. An undergraduate grade-point average of 3.20 or higher.
3. Satisfactory scores on the Graduate Record Examination General Test or a satisfactory score on the Miller Analogies Test (social science professional scale).
4. Evidence of personal traits and characteristics considered important for scholarly performance.
5. Occupational experience is given weight in the selection of master's degree candidates whenever such experience is important to the study of a specific concentration or is an important factor in obtaining appropriate employment after completion of the Master of Science degree.

## Provisional Status

Alimited number of applicants who do not satisfy the school's regular admission requirements may be accepted provisionally. These students will be judged on the basis of their potential contribution to the field of criminal justice. Students should not be enrolled on a provisional basis for more than one semester. The student must be admitted on a regular basis to be considered a degree candidate. To qualify for admission to regular status, the student must complete a minimum of 10 credits in criminal justice graduate course work with a grade-point average of 3.20 or higher.

## Requirements for the Master of Science Degree in Criminal Justice

The program is available under both Plan A (with thesis) and Plan $B$ (without thesis). The student must complete a total of 30 credits distributed as follows:

## Requirements for Both Plan A and Plan B

CREDITS

1. Core Courses

15
2. Plan $\mathbf{A}$

1. Complete 6 credits of Criminal Justice 899 Master's Thesis Research with a grade of 3.0 or better.
2. Pass an oral examination in defense of the thesis.
3. Complete 3 credits of electives approved by the academic adviser.
Plan B
4. Complete Criminal Justice 896 Policy Analysis under Conditions of Change with a grade of 3.0 or better.
5. Pass an oral examination covering the policy analysis paper completed by successfully completing Criminal Justice 896.
6. Complete 6 credits of electives approved by the academic adviser.
7. Criminal Justice electives approved by an academic adviser.
${ }^{1}$ For a student who completes the requirements for the graduate Specialization in Forensic Science.
8. A course dealing with an aspect of the legal system approved by the School of Criminal Justice may be substituted for Criminal Justice 811
9. Criminal Justice 815 may be substituted for Criminal Justice 812.

## Doctor of Philosophy

The Doctor of Philosophy degree in criminal justice focuses on criminal justice and criminology and theory-based knowledge of crime, criminal justice organizations and processes and the law. During the course of doctoral study, students are expected to develop the depth, breadth and consistency of their training in research methods and their applications of analytical capabilities to administrative and policy issues.

## CRIMINAL JUSTICE

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

To be eligible for admission to the Doctor of Philosophy program in Criminal Justice, an applicant must have:

1. Completed an undergraduate degree in criminal justice or related social science field.
2. An overall grade-point average of at least 3.2 in the most recent academic degree (master's or bachelor's).
3. Satisfactory scores on the Graduate Record Examination (GRE) General Test as judged by the faculty.
4. Evidence of experience in social science research, such as the completion of a master's thesis.

## Requirements for the Doctor of Philosophy Degree in Criminal Justice

Students who are enrolled in the Doctor of Philosophy degree program in Criminal Justice must complete a minimum of 72 credits.

1. Completion of 18 credits in Criminal Justice 901, 904, 905, 906, 907, and 908.
2. Completion of 12 credits of additional criminal justice courses at the 800 level or above.
3. Completion of 12 additional credits outside the School of Criminal Justice as approved by the student's guidance committee.
4. Completion of two 3-credit doctoral research methods courses in the College of Social Science as approved by the student's guidance committee.
5. Satisfactory completion of 24 credits of Criminal Justice 999 and defense of a doctoral dissertation.
Normally students complete the requirements for the Doctor of Philosophy degree in three years.

## FORENSIC SCIENCE

## Master of Science

Several colleges and departments within Michigan State University cooperate to offer the Master of Science in Forensic Science. These include the College of Agriculture and Natural Resources in cooperation with the Department of Community, Agriculture, Recreation and Resource Studies; the College of Human Medicine in cooperation with the Department of Radiology; the College of Natural Science in cooperation with the departments of Chemistry; Pharmacology and Toxicology, Statistics and Probability, and Zoology as well as the Center for Advanced Microscopy, the Genetics Program and the Medical Technology Program; and the College of Social Science in cooperation with the Department of Anthropology and the School of Criminal Justice. The School of Criminal Justice is the primary administrative unit.
This program is designed to give all students a broad, theoretical and practical background in the scientific, legal and investigative aspects of forensic science while providing the opportunity to study one of the major disciplines in depth. Students enrolled in this program must complete a concentration in one of the following areas: forensic chemistry, forensic biology, or forensic anthropology.
A thesis is required of all students and opportunities exist for an internship in a practicing United States or international forensic science laboratory
In addition to meeting the requirements of the University and the College of Social Science, students must meet the requirements specified below.

## Admission

To be considered for admission to the Master of Science degree program in forensic science, an applicant must have:

1. completed a Bachelor of Science or Bachelor of Arts degree in a discipline appropriate to the desired concentration. For example, a student who desires to complete the concentration in forensic chemistry must have a bachelor's degree in chemistry or a closely allied science such as biochemistry.
2. a cumulative grade-point average of at least 3.0 for all course work in the bachelors degree.
3. satisfactory scores in the Graduate Record Examination General Test as judged by the program faculty. No substantive area GRE exams are required.

## Requirements for the Master of Science Degree in Forensic Science

The program is available only under Plan A (with thesis). Each student will have a thesis advisory committee comprised of the academic adviser and two other program faculty. The student must complete at least 38 credits as follows:

CREDITS

1. The following course (4 credits):

CJ 805 Survey in Forensic Science. . . . . . . . . . . . . . . . . . . . . . . . 4
2. One of the following concentrations:

Forensic Chemistry (19 credits)
CEM 832 Mass Spectrometry

$\begin{array}{llll}\text { CJ } & 819 & \text { Forensic Analysis of Drugs and Alcohol ............... } & 3 \\ \text { CJ } & 820 & \text { Forensic Chemistry and Microscopic Evidence. . . . . . }\end{array}$
NSC 802 Essentials of Electron Microscopy
NSC 820 Scanning Electron Microscopy; Energy Dispersive
X-ray Microanalysis
3
PHM 450 Introduction to Chemical Toxicology ................................................. 3
Forensic Biology (20 credits):
BMB 801 Molecular Biology
CJ 817 Law and Forensic Science
CJ 820 Forensic Chemistry and Microscopic Evidence.

$\begin{array}{lll}\text { CJ } 825 & \text { Forensic Serology }\end{array}$
FOR 842 Population Genetics, Genealogy and Genomics ...... 3
FW 828 Conservation and Genetics
STT 464 Statistical Methods for Biologists I .................... 3
Forensic Anthropology ( 25 credits):
ANP 840 Osteology and Forensic Anthropology
ANP 841 Bioculural Evolution
ANP 842 Human Osteology
ANP 844 Topics in Forensic Anthropology
Students must enroll for Anthropology 844 twice, in increments of 2 credits.
3. Complete 6 credits in Forensic Science 899 Master's Thesis Research.
with the student's academic adviser
5. Pass an oral examination in defense of the thesis

## GRADUATE SPECIALIZATION IN JUDICIAL ADMINISTRATION

Management of the courts and the judicial process in contemporary society requires expert knowledge and complex skills. The courts need qualified professionals who can ensure that the public receives timely and just resolution to cases requiring judicial intervention.

The Specialization in Judicial Administration, which is administered by the School of Criminal Justice within the College of Social Science, is available online as an elective to students who are enrolled in master's degree programs at Michigan State University. This specialization is designed to meet the educational needs of students currently working in the judicial system. It prepares students to understand the purposes and responsibilities of the courts; leadership and its role in guiding the courts; and interaction with the community. It provides opportunities to learn how to obtain and manage human resources including staff education and development, budgets, and fiscal resources; manage cases and information technology effectively; envision and plan strategically; and implement and manage auxiliary court programs and required services, which complement and support the core functions of the courts.

With the approval of the department or school and college that administers the student's degree program, courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the master's degree. The student's program of study must be approved by the student's guidance committee for the specialization.

## Requirements for the Graduate Specialization in Judicial Administration

CREDITS
The student must:

1. Complete all of the following core courses ( 12 credits):

CJ 810 Proseminar in Criminal Justice
CJ 812 Criminal Justice Management Semina
CJ 814 Seminar in Management Topics
Justice acal
Justice academic adviser
Upon completion of the requirements for the Graduate Specialization in Judicial Administration, the student should contact the Director of the School of Criminal Justice and request certification for the completion of the specialization. After the certification is approved by the Director of the School of Criminal Justice and the Associate Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## GRADUATE SPECIALIZATION IN SECURITY MANAGEMENT

The complexities of modern society have combined to generate a variety of threats to business organizations, information networks, government installations and operations, and individuals. The Graduate Specialization in Security Management is designed for students who are interested in private and government security.

The specialization, which is administered by the School of Criminal Justice, is available as an elective to students who are enrolled in master's degree programs at Michigan State University. The specialization should be of particular interest to students who are enrolled in certain programs in the Eli Broad College of Business and the College of Social Science.
The Specialization in Security Management is designed to help students to understand:

1. The business and technical aspects of protecting private and government assets.
2. The administrative, management, technical, and legal problems of asset protection and loss prevention.
3. Concepts related to protecting personal and personnel rights, proprietary information, facilities, and other assets of an organization.
4. Security's relationship to the value of freedom and democratic principles in our society.
With the approval of the department or school and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the master's degree.

## Requirements for the Graduate Specialization in Security Management:

The student must complete:
CREDITS

1. All of the following courses ( 15 credits):


CJ 811 Design and Analysis in Criminal Justice Research
CJ 812 Criminal Justice Management Seminar
CJ 885 Security Management.
CJ 886 Security Administration
812 wivalinal Justice 811 and

LIR 823 Organizational Behavior in Labor and Industrial Relations

PLS 810 Prominar Public
PSY 860 Industrial and Organizational Psychology
Upon completion of the requirements for the master's degree and the requirements for the Graduate Specialization in Security Management, the student should contact the Director of the School of Criminal Justice and request certification for the completion of the specialization. After the certification is approved by the Director of the School and the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## DEPARTMENT of ECONOMICS

Rowena Pecchenino, Chairperson

## UNDERGRADUATE PROGRAMS

The Department of Economics offers Bachelor of Arts and Bachelor of Science degrees in Economics. These degree programs provide a broad education involving the domestic and international economy and include the study of institutions, concepts, policy, and tools of analysis. Our students prepare for careers in business such as banking, financial markets, insurance, law, management, and consulting; for careers in national, state, and local governments; in teaching; and for graduate study in economics and related fields including business administration, finance, public policy, and law.

The Department stresses flexibility in each undergraduate program and requires a strong core of economic theory, supplemented by mathematics, data analysis or statistics, and computer science. Students in each of these degree programs choose area electives within the department as well as in the College of Social Science and the University. All students are encouraged to develop programs of study that are tailored to their individual needs and interests.

Beyond the introductory courses in microeconomics and macroeconomics, the department offers courses in a number of areas of emphasis. These areas of emphasis are listed below, along with their respective course offerings.
Microeconomics

| EC | 251 H | Microeconomics and Public Policy |  |
| :--- | :--- | :--- | :---: |
| EC | 301 | Intermediate Microeconomics |  |
| EC | 401 | Advanced Microeconomics |  |
| Macroeconomics and Monetary Theory |  |  |  |
| EC | 252 H | Macroeconomics and Public Policy |  |
| EC | 302 | Intermediate Macroeconomics |  |
| EC | 330 | Money, Banking, and Financial Markets |  |
| EC | 402 | Advanced Macroeconomics |  |
| Economic Systems |  |  |  |
| EC | 306 | Comparative Economic Systems |  |
| EC | 406 | Economic Analysis of Russia and the Commonwealth |  |
| of Independent States |  |  |  |
| Development |  |  |  |
| EC | 310 | Economics of Developing Countries |  |
| EC | 410 | Issues in the Economics of Developing Countries |  |
| EC | 412 | Ecconomic Analysis of Latin America |  |
| EC | 413 | Economic Analysis of Asia |  |
| EC | 414 | Economic Analysis of Sub-Saharan Africa |  |
| Econometrics |  |  |  |
| EC | 320 | Analysis of Economic Data |  |
| EC | 420 | Introduction to Econometric Methods |  |
| EC | 421 | Advanced Econometric Methods |  |
| Public Economics |  |  |  |
| EC | 335 | Taxes, Government Spending and Public Policy |  |
| EC | 435 | Public Expenditures |  |
| EC | 436 | Public Revenues |  |

International Economics
EC 340 Survey of International Economics
EC 440 International Trade
EC 441 International Finance
Industrial Organization
EC 360 Private Enterprise and Public Policy
EC 460 American Industry: Structure and Behavior
Labor Economics
EC 380 Labor Relations and Labor Market Policy
EC 480 Analysis of Labor Markets
Law And Economics
EC 425 Law and Economics
Health and Welfare
EC 495 Economics of Poverty and Income Distribution
EC 498 Economics of Health Care
Capstone Course
EC 499 Senior Seminar for Economics Majors (W)

## ECONOMICS

The Bachelor of Arts Degree in Economics emphasizes the use of quantitative techniques in the analysis of economic theories.

## Requirements for the Bachelor of Arts Degree in Economics

1. The graduation requirements of the University as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Economics.
The completion of Mathematics 124 or 132 or 152 H , referenced in item 3. d. (2) below, may also satisfy the University mathematics requirement. Courses that are used to satisfy the University mathematics requirement may not be counted toward the College of Social Science NATURAL SCIENCE REQUIREMENT, referenced in section I. C. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement.
The University's Tier II writing requirement for the Economics major is met by completing Economics 499. That course is referenced in item 3. a. below.
2. The requirements of the College of Social Science for the Bachelor of Arts degree. CREDITS
3. The following requirements for the major:

Students may elect to complete more economics courses than those needed to complete the requirements for the major, with the understanding that the grades earned in such courses will be included in the computation of the grade-point average for courses in the major to meet College of Social Science graduation requirements.
a. All of the following courses in the Department of Economics (18 credits)

EC 201 Introduction to Microeconomics . . . . . . . . . . . . . . 3
EC 202 Introduction to Macroeconomics . . . . . . . . . . . . . . . 3
$\begin{array}{lll}\text { EC } & 301 & \text { Intermediate Microeconomics . . . . . . . . . . . . . . . . . } 3 \\ \text { EC } & 302 & \text { Intermediate Macroeconomics . . . . . . . . . . . . } 3\end{array}$
C 302 Intermediate Macroeconomics.
EC 499 Senior Seminar for Economics Majors (W) . . . . . . . 3
Economics 251H may be substituted for Economics 201 and 301. Students who elect this substitution, and who do not take Economics 252 H , may satisfy the requirement referenced in item 3. c. by completing at least 2 to 3 credits in Economics courses at the 300-400 level, in addition to the 9 credits referenced in item 3. c.

Economics 252 H may be substituted for Economics 202 and 302. Students who elect this substitution, and who do not take Economics 251 H , may satisfy the requirement referenced in item 3. c. by completing at least 3 credits in Economics courses at the 300-400 level, in addition to the 9 credits referenced in item 3. c.

Economics 251 H and 252 H may be substituted for the following group of courses: Economics 201, 202, 301, and 302. Students who elect this substitution may satisfy the requirement referenced in item 3. c. by completing at least 5 to 6 credits in two Economics courses at the 300-400 level, in addition to the 9 credits referenced in item 3. c.
b. One of the following courses in the international area ( 3 credits): Economics 306, 310, 340, 385, 406, 410, 412, 413, 414, 440, and 441.
c. Nine additional credits in economics courses, of which at least 6 credits must be at the 400-level.
d. The following courses outside the Department of Economics (9 credits):
(1) One of the following courses (3 credits):

CSE 101 Computing Concepts and Competencies . . . . 3 CSE 131 Introduction to Technical Computing. . . . . . . . 3 Students who pass a waiver examination will not be required to complete Computer Science and Engineering 101. Students may substitute Computer Science and Engineering 231 for Computer Science and Engineering 131.
(2) One of the following courses (3 credits):

MTH 124 Survey of Calculus I . . . . . . . . . . . . . . . . . . . . 3
MTH 132 Calculus I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MTH 152 H Honors Calculus I . . . . . . . . . . . . 3
Mathematics 132 or 152 H is recommended for students who
plan to pursue graduate study.
(3) One of the following courses (3 credits):

STT 315 Introduction to Probability and Statistics for Business
STT 421 Statistics I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

STT 430 Introduction to Probability and Statistics . . . . . 3 STT 441 Probability and Statistics I: Probability
Computer Science and Engineering 101 and 131, Statistics
and Probability $315,421,430$, and 441 may be applied to-
ward the College of Social Science NATURAL SCIENCE REQUIREMENT.
In addition to the requirements for the major, students may elect to complete a cognate in business. The requirements for the cognate are met by completing four of the following courses ( 12 credits):
$\begin{array}{lll}\text { ACC } & 230 & \text { Survey of Accounting Concepts . . . . . . . . . . . . . . . . . . } 3 \\ \text { FI } & 320\end{array}$
GBL 323 Introduction to Business Law . . . . . . . . . . . . . . . . . . . . . . 3

MGT 325 Management Skills and Processes . . . . . . . . . . . . . . . . . 3
$\begin{array}{ll}\text { MSC } & 327 \text { Introduction to Marketing. . . . . . . . . . . . . . . . . . . . . . } \\ \text { Students may substitute Accounting } 201 \text { and } 202 \text { for Accounting } 230 \text {. }\end{array}$

## Bachelor of Science

The Bachelor of Science Degree in Economics emphasizes the use of advanced math and science in the analysis of economic theories. The program offers students more emphasis on mathematics, statistics, and computer science, as preparation for those who wish to pursue graduate training in economics.

## Requirements for the Bachelor of Science Degree in Economics

1. The graduation requirements of the University as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Economics.
The completion of Mathematics 132 or 152H, referenced in item 3. d. (2) below, may also satisfy the University mathematics requirement. Courses that are used to satisfy the University mathematics requirement may not be counted toward the College of Social Science NATURAL SCIENCE REQUIREMENT, referenced in section I. C. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement.
The University's Tier II writing requirement for the Economics major is met by completing Economics 499, referenced in item 3. a. below.
2. The requirements of the College of Social Science for the Bachelor of Science degree, Students pursuing the Bachelor of Science Degree in Economics are required to choose from the following list of courses for the College of Social Science NATURAL SCIENCE REQUIREMENT:

| CSE | 231 | Introduction to Programming I. |
| :---: | :---: | :---: |
| CSE | 232 | Introduction to Programming II |
| MTH | 133 | Calculus II |
| MTH | 153H | Honors Calculus II |
| MTH | 234 | Multivariable Calculus |
| MTH | 235 | Differential Equations |
| MTH | 254H | Honors Multivariable Calculus. |
| MTH | 255H | Honors Differential Equations |
| MTH | 309 | Linear Algebra I |
| MTH | 310 | Abstract Algebra I and Number Theory |
| MTH | 314 | Matrix Algebra with Applications |
| MTH | 320 | Analysis I. |
| MTH | 340 | Ordinary Differential Equations I |
| STT | 441 | Probability and Statistics I: Probability |
| STT | 442 | Probability and Statistics II: Statistics |
| STT | 461 | Computations in Probability and Statistics |
| STT | 471 |  | STT 471 Statistics for Quality and Productivity .......... 3 Mathematics 235 or 255 H may be applied toward the College of Social Science NATURAL SCIENCE REQUIREMENT, but not both courses. Upon prior approval by the department, other courses may be substituted in fulfillment of the College of Social Science NATURAL SCIENCE REQUIREMENT.

3. The following requirements for the major:

Students may elect to complete more economics courses than those needed to complete the requirements for the major, with the understanding that the grades earned in such courses will be included in the computation of the grade-point average for courses in the major to meet College of Social Science graduation requirements.
a. All of the following courses in the Department of Economics ( 18 credits):

EC 202 Introduction to Macroeconomics . .
EC 301 Intermediate Microeconomics .
EC 302 Intermediate Macroeconomics
EC 420 Introduction to Econometric Methods . . . . . . . . . . . 3
499 Senior Seminar for Economics Majors (W) . . . . . . 3
Economics 251H may be substituted for Economics 201 and 301.
Students who elect this substitution, and who do not take Economics 252 H , may satisfy the requirement referenced in item 3. c. by completing at least 2 to 3 credits in Economics courses at the 300-400 level, in addition to the 9 credits referenced in item 3. c.

Economics 252H may be substituted for Economics 202 and 302. Students who elect this substitution, and who do not take Economics 251 H , may satisfy the requirement referenced in item 3.c. by completing at least 3 credits in Economics courses at the 300-400 level, in addition to the 9 credits referenced in item 3. c.

Economics 251 H and 252 H may be substituted for the following group of courses: Economics 201, 202, 301, and 302. Students who elect this substitution may satisfy the requirement referenced in item 3. c. by completing at least 5 to 6 credits in two Economics courses at the 300-400 level, in addition to the 9 credits referenced in item 3. c.
b. One of the following courses in the international area (3 credits):

Economics 306, 310, 340, 385, 406, 410, 412, 413, 414, 440, and 441.
c. Nine additional credits in economics courses, of which at least 6 credits must be at the 400-level.
d. The following courses outside the Department of Economics ( 9 credits):
(1) One of the following courses (3 credits): CSE 101 Computing Concepts and Competencies . . . . 3 CSE 131 Introduction to Technical Computing. 3 Students who pass a waiver examination will not be required to complete Computer Science and Engineering 101. Students may substitute Computer Science and Engineering 231 for Computer Science and Engineering 131. Computer Science and Engineering 101 and 131 may not be applied toward the College of Social Science NATURAL SCIENCE REQUIREMENT.
(2) One of the following courses ( 3 credits): MTH 132 Calculus I MTH 152H Honors Calculus I.......................................... 3
(3) One of the following courses (3 credits): STT 315 Introduction to Probability and Statistics for Business .3
.3 STT 421 Statistics I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 STT 430 Introduction to Probability and Statistics . . . . . 3 STT 441 Probability and Statistics I: Probability . . . . . . 3 Statistics and Probability 441 may be applied toward the College of Social Science NATURAL SCIENCE REQUIREMENT.
In addition to the requirements for the major, students may elect to complete a cognate in business. The requirements for the cognate are met by completing four of the following courses (12 credits):
ACC 230 Survey of Accounting Concepts . . . . . . . . . . . . . . . . . . . 3
FI 320 Introduction to Finance . . . . . . . . . . . . . . . . . . . . . . . . . . 3
$\begin{array}{lll}\text { GBL } & 323 & \text { Introduction to Business Law . . . . . . . . . . . . . . . . . . . . . . . . } 3 \\ \text { MGT } & 325 & \text { Management Skills and Processes . . . . . . . . . . . . . }\end{array}$
MSC 327 Introduction to Marketing. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Students may substitute Accounting 201 and 202 for Accounting 230.

## TEACHER CERTIFICATION OPTIONS

The economics disciplinary major leading to the Bachelor of Arts or Bachelor of Science degree is available for teacher certification. An economics disciplinary minor is also available for teacher certification. Students who elect the economics disciplinary major or the economics disciplinary minor must contact the Department of Economics.
For additional information, refer to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

## GRADUATE STUDY

The Department of Economics offers work leading to the Master of Arts and Doctor of Philosophy degrees in preparation for professional careers in business, government, teaching, or research.

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The fields of specialization are:
    History of Economic Thought
    Advanced Economic Theory
    Econometrics
    Labor Economics
    Industrial Organization
    Advanced Macro and Monetary Economics
    Public Economics
    International Economics
    Economic Development
```

    Doctoral students must qualify in general economic theory and
    in two fields of specialization. Substitution of a field in another dis-
cipline is possible.

Students who are enrolled in Master of Arts and Doctor of Philosophy degree programs in the Department of Economics may elect specializations in environmental and resource economics. For additional information, refer to the statement on Interdepartmental Graduate Specializations in Environmental and Resource

Economics in the College of Agriculture and Natural Resources section of this catalog.

## Admission

Before admission to graduate work, a student should have acquired a minimum of 25 credits in the social sciences, mathematics, statistics, agricultural economics, accounting, or business administration, or in some combination of these fields. Students with limited economics in their undergraduate programs will have to correct such deficiencies by completing collateral courses, not to count toward the degree, which serve as prerequisites for the graduate economics courses.

Applicants to the graduate programs are required to submit scores on the Graduate Record Examination General Test; in addition, applicants should arrange to have three letters of recommendation and transcripts of all prior collegiate course work supplied to the department.

## Master of Arts

The Master of Arts degree is available to students enrolled in the Ph.D. degree program in Economics or, with departmental approval, as a second degree for students enrolled in other graduate degree programs. Only the Plan B (without thesis) option is available. Course requirements include the first-year core sequence in the Ph.D. program in Economics, which prepares students for continuing in the Ph.D. program or for professional careers that call for high-level training in economic theory and quantitative analysis methods.

In addition to meeting the requirements of the University, of the College of Social Science, and the Department of Economics, students must meet the requirements specified below.

## Requirements for the Master of Arts Degree in Economics

1. Complete all of the following courses ( 22 credits):

| EC | 811A | Mathematical Applications in Economics | 2 |
| :---: | :---: | :---: | :---: |
| EC | 811B | The Structure of Economic Analysis . . . | 2 |
| EC | 812A | Microeconomics I | 3 |
| EC | 812B | Microeconomics II. | 3 |
| EC | 813A | Macroeconomics I. | 3 |
| EC | 813B | Macroeconomics II | 3 |
| EC | 820A | Econometrics IA | 3 |
| EC | 820B | Econometrics IB | 3 |

2. Complete three additional Economics courses at the $800-900$ level totaling at least 8 credits.
3. Obtain a master's level pass on the written comprehensive examination in microeconomic theory, macroeconomic theory, and econometrics.

## Academic Standards

To remain in the program and receive the M. A. degree in economics, a student must:

1. Maintain at least a 3.00 grade-point average.
2. Earn a grade of 3.0 or higher in required $800-900$ level economics courses.
3. The accumulation of grades below 3.0 (including N grades in the P-N grading system) in more than two courses of 3 or more credits each removes the student from the degree program; this policy does not apply to courses below the 400 -level unless the courses are required for the student's program.

## Doctor of Philosophy

Students may be admitted to the Doctor of Philosophy degree in Economics only for a fall semester.

In addition to meeting the requirements of the University and the College of Social Science, students must meet the requirements specified below.

## Requirements for the Doctor of Philosophy Degree in Economics

1. Complete the core courses in economic theory, mathematical methods in economics, and econometrics.
2. Pass a comprehensive examination in microeconomic theory, macroeconomic theory, and econometrics.
3. Complete other course requirements as specified in the document The Doctoral Program in Economics, available from the Department of Economics.
4. Demonstrate competence in two fields of specialization and econometrics.
5. Present a research paper at the Department of Economics spring conference.
6. Present a dissertation proposal to the student's guidance committee.
7. Write an acceptable dissertation and defend it successfully in a public oral examination.

## Academic Standards

Refer to the Doctor of Philosophy degree statement in the College of Social Science section.

## DEPARTMENT of FAMILY and CHILD ECOLOGY

(Effective July 1, 2005, the department is administered by the College of Social Science. See the College of Human Ecology section of this catalog for more information.)

## Anne K. Soderman, Acting Chairperson

## DEPARTMENT of GEOGRAPHY

## Richard E. Groop, Chairperson

The discipline of geography, as the study of place and space, concerns itself with the analysis and explanation of the occurrence, distribution, and interrelationships of physical and cultural patterns on the earth's surface. The discipline is also interested in how the earth's physical and human landscapes change over time. Geography can be classified both as a social science and a natural science as it examines human beings and their environment and serves as a bridge between the physical and cultural worlds.

The undergraduate program is designed to prepare students for various careers in business, industry, education and government. Career oriented specializations are available in spatial information processing, geographic information systems, remote sensing, and regional development.

## UNDERGRADUATE PROGRAMS

The Department of Geography offers programs in geography and geographic information science leading to the Bachelor of Arts and Bachelor of Science degrees.

## GEOGRAPHIC INFORMATION SCIENCE

The Bachelor of Science Degree in Geographic Information Science provides a rigorous, in-depth program for students interested in the application of information technology to the spatial dimensions of the Earth's human and physical systems. It is an ideal program for those pursuing a career in the spatial technology sector, or for those considering graduate study in geography and related disciplines. Students attain substantial general quantitative and technical skills, as well as practical experience in the application of skills to solving problems drawn from local, regional, and global settings.

## Requirements for the Bachelor of Science Degree in Geographic Information Science

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Geographic Information Science.
The University's Tier II writing requirement for the Geographic Information Science major is met by completing Geography 425 or 480 . Those courses are referenced in item 3. below.
2. The requirements of the College of Social Science for the Bachelor of Science degree.

CREDITS
3. The following required major courses: . . . . . . . . . . . . . . . . . . . . . . . . . . . 30 to 32
a. One of the following courses (3 or 4 credits):

GEO 113 Introduction to Economic Geography . . . . . . . . . . 3
GEO 151 Cultural Geography . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
$\begin{array}{ll}\text { GEO } & 206 \\ \text { GEO Physical Geography ........................... . . . } 3 \\ 206 L \text { Physical Geography Laboratory . . . . . . . . . . . } 1\end{array}$ Students who choose Geography 206 must also enroll in Geography 206L.
b. All of the following courses (16 credits):

GEO 221 Introduction to Geographic Information. . . . . . . . . 3
GEO 324 Remote Sensing of the Environment . . . . . . . . . . . 4
GEO 325 Geographic Information Systems . . . . . . . . . . . . . 3
GEO 425 Problems in Geographic Information Science (W) 3
GEO 463 Introduction to Quantitative Methods for Geographers and Planners
.3
c. A minimum of 11 credits selected from the following: GEO 419 Applications of Geographic Information Systems to Natural Resource Management. . . . . . . . . . . 4
GEO 423 Cartographic Design and Production . . . . . . . . . . . . . . 4
GEO 424 Advanced Remote Sensing. . . . . . . . . . . . . . . . . . 4
GEO 426 Thematic Cartography. . . . . . . . . . . . . . . . . . . . . . . 4
GEO 428 Digital Terrain Analysis . . . . . . . . . . . . . . . . . . . . . . 4
GEO 453 Metropolitan Environments: Urban Forms and Land Uses
.3
GEO 480 Senior Seminar (W) . . . . . . . . . . . . . . . . . . . . . . . . 3
GEO 498 Internship in Geography . . . . . . . . . . . . . . . . . . . . 3

## GEOGRAPHY

Within the discipline of geography, a tracking system permits students pursuing a bachelor's degree to concentrate in various interest areas. The departmental adviser and faculty members are available to discuss program options and career opportunities with interested students.

## Requirements for the Bachelor of Arts Degree in Geography

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Geography.
The University's Tier II writing requirement for the Geography major is met by completing Geography 480. That course is referenced in item 3. a. below.
2. The requirements of the College of Social Science for the Bachelor of Arts degree.
3. The following required major courses: 31
a. All of the following courses:


## Requirements for the Bachelor of Science Degree in Geography

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Geography The University's Tier II writing requirement for the Geography major is met by completing Geography 480. That course is referenced in item 3. a. below.
2. The requirements of the College of Social Science for the Bachelor of Science degree. The College's NATURAL SCIENCE REQUIREMENT for the Geography major is met by completing 15 additional credits in courses offered by a department or program in the College of Natural Science, chosen from the following: Biochemistry and Molecular Biology, Biological Science, Chemistry, Entomology, Geological Sciences, Lyman Briggs, Mathematics, Microbiology and Molecular Genetics, Physics and Astronomy, Plant Biology, Plant Pathology, Physiology, Statistics and Probability, and Zoology. Students should see their academic adviser to obtain a list of approved courses which will meet this requirement.

CREDITS
3. The following required major courses:

31
a. All of the following courses:

GEO 113 Introduction to Economic Geography . . . . . . . . . . . 3
GEO 151 Cultural Geography..............
GEO 151 Cultural Geography.
.3
..............
GEO 221 Introduction to Geographic Information. . . . . . . . . . . 3
GEO $463 \begin{gathered}\text { Introduction to Quantitative Methods for } \\ \text { Geographers and Planners .................. } 3\end{gathered}$
GEO 480 Senior Seminar (W). . . . . . . . . . . . . . . . . . . . . . . . . . . 3
b. One of the following courses:

GEO $330 \begin{gathered}\text { Geography of the United States and } \\ \text { Canada . . . . . . . . . . . . . . . . . . . . . . . . } 3\end{gathered}$
GEO 333 Geography of Michigan and the Great Lakes
GEO 335 Region. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
GEO 336 Geography of Europe . . . . . . . . . . . . . . . . . . . . . . . . . 3
GEO 337 Geography of East Asia . . . . . . . . . . . . . . . . . . . . 3
GEO 338 Geography of Africa
c. Nine additional credits in Geography including at least one course at the 400 level

## SPATIAL INFORMATION PROCESSING SPECIALIZATION

The spatial information processing specialization, which is administered by the Department of Geography, is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree.
The spatial information processing specialization is designed to develop academic expertise and professional competence in collecting, manipulating, analyzing, and displaying spatially-referenced information through the geographic subdisciplines of cartography, remote sensing, and geographic information systems.

Students who plan to complete the requirements for the spatial information processing specialization should contact the undergraduate adviser for spatial information processing in the Department of Geography.

## Requirements for the Spatial Information Processing Specialization

The student must complete a minimum of 21 credits in courses as specified below:
CREDITS

1. The following course: . ............................................................. 3

3
2. One of the following course

GEO 490 Independent Study ................................................ 3
GEO 498 Internship in Geography . . . . . . . . . . . . . . . . . . . . . . . . . . 3
3. Four of the following courses:.

GEO 324 Remote Sensing of the Environment . . . . . . . . . . . . . . . . 4
GEO 326 Thematic Cartography. . . . . . . . . . . . . . . . . . . . . . . . . . . 4
GEO 423 Map Production and Design . . . . . . . . . . . . . . . . . . . . . . . 4
GEO 424 Advanced Remote Dessing
. .4
. .4
$\begin{array}{lll}\text { GEO } & 424 & \text { Advanced Remote Sensing. ............ } \\ \text { GEO } & 463 & \text { Introduction to Quantitative Methods for }\end{array}$
Geographers and Planners
.3
Upon completion of the requirements for the spatial information processing specialization, the student should contact the Chairperson of the Department of Geography and request certification for the completion of the specialization. After the certification is approved by the Chairperson of the Department of Geography and the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## TEACHER CERTIFICATION OPTIONS

A geography disciplinary minor is available for teacher certification.

Students who elect the geography disciplinary minor must contact the Department of Geography to plan their programs of study.

For additional information, refer to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

## GRADUATE STUDY

The Department of Geography offers programs in the discipline of geography leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees.

Students who are enrolled in master's or doctoral degree programs in the Department of Geography may elect an Interdepartmental Specialization in Cognitive Science. For additional information, refer to the statement on Interdepartmental Graduate Specializations in Cognitive Science. For additional information, contact the Department of Geography.

## GEOGRAPHY

## Master of Arts

The master's program in geography is designed to enable the student to achieve professional competence in the discipline. These programs are intended to increase substantive and technical proficiency.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

All students seeking the master's degree in geography are expected to have completed courses in physical, cultural/human, economic/urban, and regional geography; in quantitative methods; and in geographic information systems. Applicants who have not completed all of these requirements may be admitted, but must remedy all course deficiencies before the degree is granted.

REGULAR STATUS: The requirements for admission to the program include:

1. A bachelor's degree from a recognized college or university preferably with an undergraduate major in geography or at least 14 credits in geography and related fields.
2. A grade-point average of at least 3.40 at the time of application in both (1) all geography courses and (2) all courses completed during the junior and senior years.
3. Satisfactory scores on the Graduate Record Examination General Test.

## Requirements for the Master of Arts Degree in Geography

The Master of Arts in Geography is available only under Plan A (with thesis). The student must complete a total of 30 credits distributed as follows:


## GEOGRAPHIC INFORMATION SCIENCE

## Master of Science

The Master of Science in Geographic Information Science is a Plan B (non-thesis) degree that places emphasis on applications of analytical techniques in the field of geography. Students are trained in advanced technologies such as remote sensing, geographic information systems, cartography, and spatial analysis. The degree is aimed toward professionals who want to acquire expertise in research techniques, but who may not wish to pursue a Doctor of Philosophy degree. This program is appropriate for persons with interest, but not necessarily strong training, in the geographical sciences.

## Admission

Admission to the program is based on an evaluation of the complete application packet, which includes all transcripts and grades, letters of recommendation, a completed Background Information Form, a statement of purpose, and a summary of professional experience and awards.

Highly ranked applicants will normally have: (1) an undergraduate degree in geography or a closely related field, and/or (2) significant professional experience dealing with the analysis of spatial data in public sector environmental management, transportation planning or evaluation, or urban planning.
All students are expected to have completed: (1) the equivalent of Geography 221, Introduction to Geographic Information which is an integrated introduction to cartography, geographic informa-
tion systems, and remote sensing and (2) at least one of the following mathematics courses: Calculus I, Linear Algebra, or an introductory statistics course.

In addition to meeting the requirements of the University and the College of Social Science, students must meet the requirements specified below.

## Requirements for the Master of Science Degree in Geographic Information Science

All students in the Master of Science in Geographic Information Science must earn at least 30 credits, approved by the student's guidance committee, distributed as follows:

CREDITS

1. All of the following courses:

GEO 425 Geographic Information Systems
GEO 801 Issues in Geographical Information Science. . . . . . . . . . . . . . . 3
GEO 827 Digital Image Processing and Analysis . . . . . . . . . . . . . . . 4
GEO 874 Seminar in Geographic Information Science. . . . . . . . . . . 3
2. At least one 400-level or higher course in cartography ............
3. At least one 400 -level or higher course in quantitative or qualitative
methods . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
5. Presentation of a poster or oral paper at a professional meeting
6. Pass an exit examination administered by the student's graduate committee.

## Doctor of Philosophy

The Ph.D. program in geography is designed to develop the student's ability to conduct original research with special reference to:

1. understanding of scientific inquiry
2. knowledge of the geographic discipline.
3. understanding of a specialized area of geography such as people/environment, physical geography, regional development, or economic-regional science.
4. proficiency with analytical and technical skills particularly with respect to spatial data analysis and manipulation.
5. skills in communicating the results of research.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

Admission to the doctoral program is based upon an evaluation of the student's academic records related to both the bachelor's and master's degrees, Graduate Record Examination (GRE) General Test scores, letters of recommendation, written statements, and other pertinent information such as professional experience and related achievements. Typical entrants to the doctoral program present a grade-point average of 3.60 or higher in a recognized master's degree program, which usually includes a thesis, and satisfactory scores on the GRE.

## Requirements for the Doctor of Philosophy Degree in Geography

The student must:

1. Complete at least 56 credits while enrolled in the doctoral program including the following courses:
a. The following courses:

GEO 986 Theory and Methods in Geography. . . . . . . . . . . . . . 3
b. At least two of the following four seminars:.

3
GEO 871 Seminar in Physical Geography . . . . . . . . . . . . . . . 3
GEO 872 Seminar in Human Geography . . . . . . . . . . . . . . . . 3
GEO 873 Seminar in Human-Environment Geography . . . . 3
GEO 874 Seminar in Geographic Information Science. . . . . 3
c. One advanced-level tool course.

3

Tool courses may be in such areas as computer science, foreign language, statistics or mathematics, cartography, remote sensing, geographic information science and social science or physical science research methods. The courses may be administered
by the Department of Geography or by another department or school.
d. Courses that focus on a specialized area of geography and related course work.

17 or 18
2. In consultation with the student's guidance committee, submit a manuscript to a refereed journal.

# DEPARTMENT of HISTORY 

## Mark L. Kornbluh, Chairperson

The Department of History offers courses which deal with human societies in all geographical regions and time-periods. Courses in African, Asian, Latin American, European, and North American history provide a rich array of offerings, many of which focus on issues of race, ethnicity, and gender while providing insight into the human condition as a whole.
All courses in history have the goal of helping students learn how to think and write historically in a critical and insightful manner. History courses emphasize learning how to identify viewpoints, gather and organize historical information, distinguish facts from interpretations, and recognize historical relationships and patterns, and appreciate the relevance of historical insight to the understanding of current events and problems.

By involving all students in the process of careful analysis of evidence and thoughtful, cogent expression of ideas, the department seeks to equip students with intellectual skills which have multiple uses in the larger society outside the university. Its programs, in addition to providing a liberal education, are designed to serve as professional preparation in various fields, including teaching; the law; federal, state, and local government; work in historical societies and museums; and research.

## UNDERGRADUATE PROGRAM

The department offers a Bachelor of Arts degree program for students majoring in history.

## Requirements for the Bachelor of Arts Degree in History

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in History.
The University's Tier II writing requirement for the History major is met by completing one of the following courses: History 480, 481, 482, 483, 484, 485, 486, 487, or 488. Those courses are referenced in item 3.a.(3) below.
2. The requirements of the College of Social Science for the Bachelor of Arts degree. The completion of 12 of the 15 credits required for the College of Social Science SOCIAL SCIENCE REQUIREMENT (referenced in section I. A. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement), must either be taken in one disciplinary department or have a thematic unity. A thematic unity must be approved by the undergraduate advister for History majors.
3. The following requirements for the major:

CREDITS
a. The following History courses:

33 to 40
(1) The following course (3 credits):

HST 201 Historical Methods and Skills
(2) Three of the following courses (12 credits):
$\begin{array}{lll}\text { HST } & 140 & \text { World History to } 1500 \ldots \\ \text { HST } & 150 & \text { World History since } 1500\end{array}$
.3
.4 HST 202 U.S. History to 1876 HST 203 U.S. History since 1876. HST 205 European History to 1500 HST 206 European History since 1500 HST 209 Traditional East Asia HST 210 Modern East Asia .
(3) Two of the following courses (6 credits):

HST 480 Seminar in American History (W) HST 483 Seminar in Modern European History (W) ... 3

HST 484 Seminar in African History (W) . . . . . . . . . . . 3
HST 485 Seminar in Asian History (W)
HST 486 Seminar in Latin American History (W)
HST 487 Seminar in Comparative History (W).
HST 488 Seminar in International Relations (W) ......
HST 492 H Senior Honors Seminar. . . . . . . . . . . . . . . . . . . 3
The completion of this requirement satisfies the department's capstone course requirement. With the prior approval of the undergraduate adviser and internship coordinator, an internship taken for at least 3 credits may be substituted for the capstone course requirement.
(4) A minimum of 6 credits in History courses in each of the following areas:
(a) United States History
(b) European History
(c) African, Asian, or Latin American History
(5) History electives: Additional credits in History courses at the 300--400 level as needed to meet the requirement of at least 33 , but not more than 40, credits in courses in the major. Exception: credits in History 490 or 499 H may not be used to satisfy this requirement.
b. Second-year competency in a foreign language. This requirement may be satisfied by placing into a 300-level foreign language course based on a MSU placement test. Credits used to satisfy this requirement may be used to satisfy the College of Social Science requirement of credits in courses in the College of Arts and Letters.

## SPECIALIZATION IN AFRICAN AMERICAN HISTORY AND CULTURE

The Specialization in African American History and Culture, which is administered by the Department of History, is designed to:

1. Help students to better understand and appreciate African American art, history, literature, music, and religion.
2. Help students to become more aware of the role of African Americans within the context of American history.
3. Promote scholarship in African American history and culture.

Students who plan to complete the requirements for the specialization must contact the undergraduate adviser for African American History and Culture in the Department of History and sign a statement of interest in the specialization. The student's program of study for the specialization must be approved by that adviser.

With the approval of the department and college that administer the student's degree program, courses that are used to satisfy the requirements for the specialization may also be used to satisfy the requirements for the bachelor's degree.

## Requirements for the Specialization in African American History and Culture

CREDITS

1. Core ( 9 credits). The student must complete one of the following concentrations below:
English
ENG 349 African-American Literature I ${ }^{1} \ldots \ldots . .$.

History
HST 310 African American History to $1876^{1}$
HST 311 African American History Since $1876^{1}$
HST 312 African American Women ${ }^{1}$
2. Electives. The student must complete a minimum of 11 credits in at least three of the courses listed below. A student who meets the Core requirement by completing the English concentration must complete at least three courses outside the Department of English. A student who meets the Core requirement by completing the History concentration must complete at least three courses outside the Department of History.
IAH 211C Area Studies and Multicultural Civilizations:
The Americas (D) ${ }^{2}$
IAH 241A Creative Arts and Humanities: Music and Society in the Modern World (D) ${ }^{2}$
ENG 349 African-American Literature I
ENG 350 African-American Literature II $^{1}$
ENG 353 Women and Literature ${ }^{3}$
ENG 405 Language Use in the African-American Community
ENG 450
ENG 463 Studies in Literature of Africa
HST 310 African American History to $1876^{1}$

| HST | 311 | African American History Since $1876{ }^{1}$ | 3 |
| :---: | :---: | :---: | :---: |
| HST | 312 | African American Women ${ }^{1}$ | 3 |
| HST | 322 | History of the American South | 3 |
| HST | 480 | Seminar in American History ${ }^{4}$ | 3 |
| MUS | 130 | Jazz Band |  |
| MUS | 131 | Jazz Combo |  |
| MUS | 330 | Advanced Jazz Improvisation | 2 |
| MUS | 331 | Advanced Jazz Improvisation II | 2 |
| WRA | 125 | Writing: The American Ethnic and Racial Experience ${ }^{2}$ |  |

${ }^{1}$ This course may be used to satisfy either the requirement referenced in item 1. or the requirement referenced in item 2., but not both of those requirements.
${ }^{2}$ Only one of the following three courses may be used to satisfy the requirements for the Specialization in African American History and Culture: Writing, Rhetoric and American Cultures 125; Integrative Studies in Arts and Humanities 211C, 241A. That course may also be used to satisfy University requirements.
${ }^{3}$ To be counted toward the requirements for the Specialization in African American History and Culture, the content of this course must focus on African American culture. The undergraduate adviser for African American History and Culture in the Department of History must approve in writing the content of this course before the student enrolls in the course
${ }^{4}$ To be counted toward the requirements for the Specialization in African American History and Culture, the content of this course must focus on African American history. The undergraduate adviser for African American History and Culture in the Department of History must approve in writing the content of this course before the student enrolls in the course.
Upon completion of the requirements for the Specialization in African American History and Culture, the student should contact the Chairperson of the Department of History and request certification for the completion of the specialization. After the certification is approved by the chairperson of the department and the Dean of the College of Social Science, the Office of the Registrar will enter on the student's academic record the name of the specialization and the date that it was completed. This certification will appear on the student's transcript.

## TEACHER CERTIFICATION OPTIONS

The history disciplinary major leading to the Bachelor of Arts degree is available for teacher certification.
A history disciplinary minor is also available for teacher certification.
Students who elect the history disciplinary major or the history disciplinary minor must contact the Department of History.
For additional information, refer to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

## GRADUATE STUDY

Graduate programs in the Department of History are designed primarily for students whose career goals require a doctoral degree. In addition, to respond to particular needs of current or prospective secondary-school history teachers, the department offers a Master of Arts degree program with a major in history-secondary school teaching. The department welcomes applicants who are prepared to pursue a rigorous program of graduate study.

## HISTORY

## Master of Arts

The Master of Arts degree program in history is designed for students who desire a general course of advanced study in the field.
In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

Admission to graduate study in the Department of History is primarily to the doctoral program. However, under certain circum-
stances, the department will consider applications for admission to the Master of Arts in History from students who wish to earn a master's degree in preparation for the doctoral degree. Please consult with the Departmental Graduate Studies Director if you wish to apply for the Master of Arts in History.

To be considered for admission to the Master of Arts degree program in history, an applicant must:

1. Have the results of the Graduate Record Examination (GRE) General Test and the results of the GRE Subject Test in History forwarded to the department.
2. Submit to the department a term paper that the applicant considers to be a fair representation of his or her ability in research and writing.
3. Include in the letter required by the College a $500-1000$ word statement that addresses the applicant's goals in pursuing a Master of Arts degree program in history.
To be admitted to the program on regular status, an applicant must have:
4. A baccalaureate degree in history or in another field.
5. A grade-point average of at least 3.50 for the last two years of undergraduate study.
6. Completed a minimum of 20 semester credits in history courses with a grade-point average of at least 3.50.
7. Scores in at least the upper one-quarter on the verbal section of the GRE General Test and on the GRE Subject Test in History.
In addition, an international applicant is required to have fulfilled the University's English language proficiency requirement as described in the Graduate Education section of this catalog in one of the following three ways:
8. Have a total score of 580 (paper version) or 237 (computer version) or above on the Test of English as a Foreign Language with no subscore below 55 (paper version) or 21 (computer version) and have the approval of the English Language Center.
9. Have an average score of 85 or higher on the Michigan English Language Assessment Battery with no subscore below 83 and have the approval of the English Language Center.
10. Have an average score of 85 or higher on the English Language Center Test with no subscore below 83 and have the approval of the English Language Center.

## Guidance Committee

Before completing 8 credits in history courses, the student, with the assistance of the Graduate Director, must constitute a guidance committee of at least two faculty members in the Department of History who represent different fields of history. Until the student's guidance committee has been established, the student's program of study must be approved by the Graduate Director.

## Requirements for the Master of Arts Degree in History

The program is available under both Plan A (with thesis) and Plan $B$ (without thesis). A total of 30 credits is required for the degree under either Plan A or Plan B. The student's program of study must be approved by the student's guidance committee. The student must meet the requirements specified below:

## Requirements for Both Plan A and Plan B

1. Complete HST 803 Seminar in Methodology of Historical Research (3 credits).
2. Complete at least 15 credits in $800-900$ level history courses including one 3 credit course in historiography relevant to the student's program of study.
3. Demonstrate the ability to read historical literature in one foreign language. Credits in courses in foreign language may not be counted toward the requirements for the Master of Arts or Doctor of Philosophy in History degree programs.

## Additional Requirements for Plan A

1. Complete 6 credits of HST 899 Master's Thesis Research.
2. Pass a final oral examination that covers the student's program of study and thesis.

## Additional Requirements for Plan B

1. Pass a certifying examination, consisting of three parts, one testing the major area and two tests in each of the student's minor areas.

## Academic Standards

A student who does not demonstrate a reading knowledge of a foreign language during the first year of enrollment in the program will not be permitted to enroll in any courses with the exception of courses in a foreign language, until that requirement has been satisfied.

## Doctor of Philosophy

The program leading to the doctoral degree with a major in history is designed to provide wide knowledge in several fields of history, specialized competence in a limited area, and research techniques that will prepare the student for a career in teaching, research, government service, private industry, and other areas of professional historical activity.

The following fields of study are available to doctoral students in the department:

Ancient history
Medieval history
Early modern European history
Modern Western European history
Russian history
East European history
American history
African-American history
History of the Atlantic world
Latin American and Caribbean history
Comparative Black history
African history
Asian history
The history of women and gender relations
The department recognizes the high importance of developing among its doctoral candidates a proficiency in college teaching. To the limit of its resources, it undertakes to provide experience in teaching in the form of graduate assistantships, along with organized discussions of the ends and means of the teaching career.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

Students are admitted to the program for Fall semester only. The department must receive all application materials by January 1. Decisions on admission are announced on or shortly after March 31. In making admissions decisions, the department considers the competencies of the faculty and the needs of students and the profession.

To be considered for admission to the Doctor of Philosophy degree program in history, an applicant must:

1. Have the results of the Graduate Record Examination (GRE) General Test and the Subject Test in History forwarded to the department.
2. Submit a term paper to the department that the applicant considers to be a fair representation of his or her ability in research and writing.
3. Include in a letter required by the College a 500-1000 word statement that addresses the applicant's goals in pursuing a Doctor of Philosophy degree in history.
4. Have at least three individuals, preferably scholars with whom the applicant has had course work or other professional contact, submit letters of recommendation to the department.
To be admitted to the program with regular status, an applicant must demonstrate the appropriate reading and/or speaking knowledge in one foreign language relevant to the student's doctoral study. Applicants without a master's degree or 30 credits of approved course work, including History 803 or its equivalent; significant course work in historiography and content in the major field; and two minor areas of concentration; will be admitted provisionally. The graduate director and/or adviser will advise students regarding the removal of deficiencies and the completion of a specified number of collateral courses before regular admission to the Ph.D. in History is granted. Applicants completing these pre-Ph.D. courses will acquire a graduate academic record equivalent to the course requirements of the Master of Arts in History.

In addition, an international applicant is required to have fulfilled the University's English language proficiency requirement as described in the Graduate Education section of this catalog in one of the following three ways:

1. Have a total score of 580 (paper version) or 237 (computer version) or above on the Test of English as a Foreign Language with no subscore below 55 (paper version) or 21 (computer version) and have the approval of the English Language Center.
2. Have an average score of 85 or higher on the Michigan English Language Assessment Battery with no subscore below 83 and have the approval of the English Language Center.
3. Have an average score of 85 or higher on the English Language Center Test with no subscore below 83 and have the approval of the English Language Center.
Applicants for doctoral study should understand that the department can offer no assurance that all of the areas of professional specialization will be available to students at any particular time. It is essential that persons with specific, clearly defined academic interests communicate with the Graduate Director before making firm plans to enroll in the doctoral program.

## Guidance Committee

Students entering the doctoral program will be guided by the graduate director in the selection of courses for the first year. By the end of the second semester, students should choose their major professor and their guidance committee. The committee shall consist of at least four members: two represent the student's major field, one of whom shall chair the student's guidance committee and direct the dissertation. In addition, two faculty members, one from each of the student's chosen two minor fields, will serve on the committee.

## Requirements for the Doctor of Philosophy Degree in History

The student must:

1. Complete at least 3 credits in the historiography courses specified by the graduate adviser or guidance committee.
2. Complete at least 9 credits in additional 800-900 level courses in a major field of history as specified by the student's guidance committee. The major field should be the field in which the student plans to focus research for the dissertation. The available major fields of history are referenced above.
3. Complete at least 6 credits in each of the student's two minor fields or in one minor field of history and in one minor field in a related discipline.
4. Student must demonstrate knowledge of a second foreign language before they may take the comprehensive examinations. This requirement for students formally admitted to the Ph.D. program can be fulfilled by one of these three options:
a. Competency in an additional (second) foreign language.
b. With approval of the student's guidance committee, the student may substitute certification in humanities computing for the second foreign language.
c. With the approval of the student's guidance committee, the student may complete courses in a supporting discipline such as statistics, philosophy, economics, or anthropology in lieu of demonstrating knowledge of a second foreign language. The supporting discipline shall constitute the student's third minor field. A faculty member in the supporting discipline shall be added as a fifth member of the student's guidance committee.
5. Pass the following comprehensive examinations:
a. A 3-4 hour written examination in the student's major field and a 3-4 hour written examination in each of the student's minor fields. This requirement must be satisfied during one semester of enrollment in the program and should be completed during the fifth semester.
b. An oral examination of up to three hours. This requirement must be satisfied after the student has passed the written examinations.
c. Pass a final oral examination in defense of the dissertation.

## Academic Standards

A student who does not demonstrate a reading knowledge of a foreign language during the first year of enrollment in the program will not be permitted to enroll in any courses, with the exception of courses in a foreign language, until that requirement has been satisfied.

## HISTORY-SECONDARY SCHOOL TEACHING

## Master of Arts

The Master of Arts degree program in history-secondary school teaching is designed specifically for secondary school teachers and is a terminal degree program.
In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

To be admitted to the Master of Arts degree program in his-tory-secondary school teaching on regular status, an applicant must have:

1. A bachelor's degree with a major in history or in another field.
2. A grade-point average of at least 3.00 in the junior and senior years of the baccalaureate program.
3. A minimum of 20 semester credits in history courses with a grade-point average of at least 3.00.
4. One year of experience teaching history in a secondary school.
In addition, an international applicant is required to have fulfilled the University's English language proficiency requirement as described in the Graduate Education section of this catalog in one of the following three ways:
5. Have a total score of 580 or above on the Test of English as a Foreign Language with no subscore below 55 and have the approval of the English Language Center.
6. Have an average score of 85 or higher on the Michigan English Language Assessment Battery with no subscore below 83 and have the approval of the English Language Center.
7. Have an average score of 85 or higher on the English Language Center Test with no subscore below 83 and have the approval of the English Language Center.

## Guidance Committee

Before completing 9 credits in history courses, the student, with the assistance of the Graduate Director and the History Education Adviser, must constitute a guidance committee of at least two faculty members in the Department of History who represent different fields of history. Until the student's guidance committee has been established, the student's program of study must be approved by the Graduate Director and the History Education Adviser.

## Requirements for the Master of Arts Degree in History-Secondary School Teaching

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's guidance committee. The student must meet the requirements specified below:

CREDITS

1. Complete at least 15 credits in $800-900$ level history courses including HST 803 Seminar in Methodology of Historical Research. HST 898 Master's Research
One course in historiography relevant to the student's program of study.
Courses in two of the following three areas that are commonly taught in secondary schools: American civilization, European civilization, and African or Asian or Latin American civilization.
2. Complete 6 to 9 credits in one or two disciplines related to history.
3. Pass an oral final certifying examination administered by the student's guidance committee.

## Residence

The student must complete at least 12 credits in courses that are to be counted toward the requirements for the degree on the East Lansing campus of Michigan State University.

# SCHOOL of LABOR and INDUSTRIAL RELATIONS 

## Theodore Curry, Director

In recognition of Michigan's position as one of the foremost industrial states in the nation, Michigan State University has established a School of Labor and Industrial Relations in the College of Social Science. The school's objective is to serve the needs of students, faculty, labor, management, and the public by offering graduate instruction, conducting research, and making available extension courses, conferences, workshops, and special institutes.

## Research and Program Services

RESEARCH PROGRAM. The school's Research Program is as broad as the field of labor and industrial relations. Specific projects are determined largely by the interests of the research faculty and include such subject-matter areas as economic and social implications of technological change, collective bargaining, union structure and government, human resource decisions, organizational behavior and development, labor economics, industrial and occupational sociology, labor history, and labor legislation. Faculty members are assisted in their research by graduate research assistants.
LABOR EDUCATION PROGRAM . The school's Labor Education Program offers non-credit courses, institutes, and conferences for workers based upon their needs and interests. The objective of these programs is to provide a greater understanding of the nature and problems of labor relations and citizenship so that workers may play a more intelligent and effective role in their organizations and in their communities. Programs are planned in cooperation with individual groups, as well as with an advisory committee consisting of representatives of the labor movement in Michigan with responsibilities for educational activities.

HUMAN RESOURCES EDUCATION AND TRAINING CENTER (HRETC). The HRETC conducts non-credit courses, conferences, and workshops to meet the needs of management and government in the human resource field. Subject areas include organizational development; human resource administration; wage and salary administration; contract negotiations; recruitment, selection, and placement; and affirmative action. This service works closely with management groups in planning its programs, as well as with an advisory committee made up of prominent representatives of industry and government in Michigan.

## GRADUATE STUDY

## LABOR RELATIONS and HUMAN RESOURCES

The school offers a professional program of study leading to a Master of Labor Relations and Human Resources (MLRHR) degree. This program is for students interested in labor-management relations and human resources decisions who plan to pursue careers in business, government, or unions. In industry there are opportunities for men and women in industrial relations or human resources departments. Government agencies at the federal and state levels employ trained specialists to administer laws and programs dealing with labor-management relations, social security, worker's compensation, and other aspects of labor and industrial relations and human resources decisions. Labor
unions seek trained people for staff positions in their education and research departments and in other activities. Community colleges and universities employ MLRHR graduates to teach in labor and management extension programs.

Students who meet the undergraduate prerequisites may be able to complete the MLRHR degree in four semesters of full-time study. For students who are employed during the day, the school normally offers all courses required for the MLRHR degree and most of its elective courses in the evening, at least once every four years.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

To be considered for admission to the degree program, a student must have a bachelor's degree and a grade-point average of 3.00 or better in the junior and senior years. All applicants must have satisfactory scores on the Graduate Record Examination (GRE) General Test or on the Graduate Management Admission Test (GMAT). Applicants should have completed one course in microeconomic principles, one course in statistics, and one introductory course in behavioral science, with acceptable grades specified by the department. In addition, applicants will be judged on the quality of their statement of objectives and three letters of reference from faculty members. Admission requirements may be higher when few program vacancies exist. Students with less than the specified prerequisites may be considered for admission to provisional status.

## Requirements for the Master of Labor Relations and Human Resources Degree in Labor Relations and Human Resources

The program is available under both Plan A (with thesis) and Plan B (without thesis). The student must complete 36 credits with a grade-point average of at least 3.00.

1. All of the following courses: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
$\begin{array}{lll}\text { LIR } & 809 & \text { Labor Markets . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 3 \\ \text { LIR } & 823 & \text { Organizational Behavior in Labor and Industrial }\end{array}$
Relations . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
$\begin{array}{lll}\text { LIR } & 824 & \text { Human Resource Strategies and Decisions . . . . . . . . . . . } 3 \\ \text { LIR } & 825 & \text { Compensation and Benefits Systems . . . . . . . . . . . } 3\end{array}$
$\begin{array}{lll}\text { LIR } & 825 & \text { Compensation and Benefits Systems . . . . . . . . . . . . . . } 3 \\ \text { LIR } & 832 & \text { Data Sources in Labor and Industrial Relations . . . . . } 3\end{array}$
LIR 858 Collective Bargaining ............................... . . . . . 3
LIR 863 Law of Labor Management Relations . . . . . . . . . . . .
adviser or guidance committee.
15
Depending on the student's interests and career plans, courses in such areas as labor and industrial relations, economics, management, political science, psychology, social work, and sociology may be designated to satisfy this requirement.

## LABOR RELATIONS and HUMAN RESOURCES-LAW

Labor Relations and Human Resources students who are admitted to the dual MLRHR/JD program with the Michigan State University - College of Law may transfer a maximum of 9 credits from the MSU/College of Law program to the MLRHR program. These credits may be used only to satisfy elective credits. Only Plan B (without thesis) is available for election under the dual degree program.

## Doctor of Philosophy

The School of Labor and Industrial Relations offers a Doctor of Philosophy degree in Industrial Relations and Human Resources to prepare students for a career as a scholar in employment relations or human resources in a tenure-track position at a re-search-oriented university. Students study employment

SOCIAL SCIENCE
School of Labor and Industrial Relations
phenomena from the perspective of multiple actors including employees, employers, unions, the government, and society at-large. The program integrates tools from diverse disciplines including economics, management, and psychology.

## Admission

Admission to this doctoral program is based on an evaluation of the student's academic record, the Graduate Record Examination (GRE) general test or the Graduate Management Admission Test (GMAT) scores, letters of recommendation, written statements, and an application form. For further details, visit our website at www.lir.msu.edu.

## Requirements for the Doctor of Philosophy Degree in Industrial Relations and Human Resources

Students will complete course work and seminars within the School of Labor and Industrial Relations, within other departments in the University, and specifically in the areas of statistics and research methods. Students will be required to pass comprehensive examinations based on their course work, to demonstrate research competency by writing an empirical research paper, and to defend their dissertation successfully.

## SCHOOL of PLANNING, DESIGN and CONSTRUCTION

## Robert D. von Bernuth, Director

The School of Planning, design and Construction is administered jointly by the College of Agriculture and Natural Resources and the College of Social Science.

## UNDERGRADUATE PROGRAMS

The school offers a Bachelor of Science degree program with a major in urban and regional pllaning through the College of Social Science. That program is described below.

The school also offers Bachelor of Science degree programs with majors in construction management, and interior design as well as a Bachelor of Landscape Architecture degree program through the College of Agriculture and Natural Resources. For information about those programs, refer to the statement on the School of Planning, Design and Construction in the College of Agriculture and Natural Resources section of this catalog.

## URBAN AND REGIONAL PLANNING

The undergraduate program in urban and regional planning is intended to provide students with a basic understanding of the history of urbanism, the theory and principles of urban design, and the relevant legal and administrative procedures. Students study the techniques of survey and research used in the analysis of the structure and growth of urban areas. They are involved in written and graphic communication. They recognize the contributions made by other disciplines concerned with the study of urban development. By developing systematic programs for the orderly and unified arrangement of urban physical structures, students focus their accumulated knowledge and skills on specific urban problems. The undergraduate program, which has been accred-
ited by the Planning Accreditation Board, is designed to prepare majors to assume the responsibilities encountered in entry level professional planning practice.

## Requirements for the Bachelor of Science Degree in Urban and Regional Planning

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Urban and Regional Planning.
The completion of Statistics and Probability 201 referenced in item 3.b. below may also be used to satisfy the University mathematics requirement. However, a course that is used to satisfy the University mathematics requirement may not be counted toward the College of Social Science NATURAL SCIENCE REQUIREMENT (referenced in section II. B. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement).
The University's Tier II writing requirement for the Urban and Regional Planning major is met by completing Urban Planning 343 or 365 . Those courses are referenced in item 3. a. below.
2. The College of Social Science requirements for the Bachelor of Science degree

Courses taken to fulfill requirements 3.b., 3.c., and 3.d. in the major may, where applicable, be used to satisfy college requirements.
The College's ARTS AND LETTERS REQUIREMENT for the Urban and Regional Planning major is met by completing 6 credits in courses chosen from the following disciplines: English, Linguistics, Music, Philosophy, Religious Studies, Studio Art, Theatre, and foreign language.
The College's NATURAL SCIENCE REQUIREMENT for the Urban and Regional Planning major is met by completing 15 credits in courses in the natural sciences, chosen from two of the following disciplines: Biochemistry and Molecular Biology, Biological Science, Computer Science and Engineering, Mathematics, and Physics and Astronomy. Students should see their academic adviser to obtain a list of approved courses which will meet this requirement.
3. The following requirements for the major:

CREDITS
a. All of the following Urban Planning Core Courses: .

UP 201 The Role of Planning in Urban and Regional Development
................... 4
UP $314 \begin{gathered}\text { Methods for Investigation of } \\ \text { Urban Systems ........................... . . . } 4\end{gathered}$
UP $314 \begin{gathered}\text { Methods for Investigation of } \\ \text { Urban Systems ........................... . . . } 4\end{gathered}$
.4

UP 324 Visual Communication and the Design Process . .
UP 343 Planning Theory: Ethics and Politics (W)....... 4
UP 353 Land Use Planning.
UP 365 Planning Law (W).
454 Local Economic Planning . . . . . . . . . . . . . . . . . . . . . . . . 3
494 Planning Practicum . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Other Required Courses: . . . . . . . . . . . . . . . .
CSE 101 Computing Concepts and Competencies . . . . . . . 3 (Track C or D)
EC 201 Introduction to Microeconomics ................. 3
GEO 221 Introduction to Geographic Information. . . . . . . . . 3
MTH 103 College Algebra. . . . . . . . . . . . . . . . . . . . . . . . . . . 3
PLS 100 Introduction to American National 3
STT 201 Statistical Methods . . . . . . . . . . . . . . . . . . . . . . . .
c. Cognate Areas: At least two courses of no less than 3 credits in each of the following three subject areas. A list of approved courses must be obtained from the Program adviser . . . . . . . . .

Environment
Urban Society
Government
d. Advanced Guided Elective. One course of at least 3 credits, chosen from a list provided by the academic adviser.

## GRADUATE STUDY

The School of Planning, Design and Construction is administered jointly by the College of Agriculture and Natural Resources and the College of Social Science. The school offers a Master of Urban and Regional Planning degree program with a major in urban and regional planning, and a Master of International Planning Studies degree program with a major in international planning studies through the College of Social Science. Those programs are described below. The school also offers Master of Arts degree programs with majors in environmental design, and interior design and facilities management; a Master of Science degree program in construction management, and a Doctor of Philosophy degree program with a major in planning, design and construction through the College of Agriculture and Natural Resources. For information about those programs, refer to the statement on the School of Planning, Design and Construction in the College of Agriculture and Natural Resources section of this catalog.

## INTERNATIONAL PLANNING STUDIES

The Master of International Planning Studies (MIPS) is a one-year ( 2 semesters and one summer) program that is designed for practitioners currently employed in urban and regional planning or related fields who desire additional knowledge in the field of community and regional development. Prospective students must have direct experience in the international aspects of planning or related fields that directly relate to their proposed area of concentration.

## Admission

Applications for admission must hold an advanced degree or have significant experience in international planning, and seek knowledge about urban and regional conditions and related areas such as real estate, economic development, environmental protection and international planning. Applicants must demonstrate that the degree will strengthen their career credentials and make them more competitive in the applicant's chosen international planning profession. Prospective students are assumed to have a basic knowledge of planning concepts.

## Requirements for the Master of International Planning Studies Degree

The program is available under Plan B (without thesis) only. The student must complete at least 30 credits as specified below.

CREDITS
The student must

1. Complete the following core courses ( 12 credits):

UP 801 Concepts and Issues in Planning and Development. .
UP 844 Decision Theory for Urban Planning and Development .
UP 894 Planning Practicum .
2. Complete one of the following courses ( 3 credits)

UP 890 Independent Study
UP 893 Internship in Urban Planning.
. Complete one additional 3 credit course at the 400 ...................... approved by the student's academic adviser.
4. Complete a minimum of 12 credits in a concentration related to international planning studies chosen from the following fields: economic development, environmental protection, international planning, or real estate. The concentration course work must be approved by the student's academic adviser.
5. Successfully complete a final examination.

## URBAN AND REGIONAL PLANNING

## Master in Urban and Regional Planning

The graduate program leading to a degree of Master in Urban and Regional Planning at Michigan State University is structured to provide students with learning opportunities that enable them to develop mechanical skills and intellectual qualities necessary to address the broad and varied range of problems associated with urban development. It is intended that, upon completion of their studies, they should be able to enter the profession as competent practitioners.
A student entering the graduate program in urban and regional planning is expected to concentrate, under faculty guidance, on studies that provide an optimum learning experience in applying the various principles, theories, techniques, and design skills of planning to specific field problems. Unlike the undergraduate, whose studies are divided between liberal education and technical studies, the graduate student is immersed exclusively in significant planning studies. The graduate program is designed to provide professional competence. The master's program in Urban and Regional Planning has been accredited by the American Planning Association.
After graduation, the student should be capable of assuming responsibilities on an intermediate level of a professional planning operation.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

To be admitted to the master's degree program, the applicant must have a bachelor's degree from a recognized university with an acceptable academic record. The field of undergraduate study is not critical for acceptance, but course requirements for collateral studies will vary according to individual undergraduate backgrounds. Each student's program is composed to fit particular needs in accordance with undergraduate training and any planning experience the applicant may have had.

## Requirements for the Master in Urban and Regional Planning Degree with a Major in Urban and Regional Planning

The program is available under both Plan $A$ (with thesis) and Plan $B$ (without thesis). The student must complete at least 48 credits, at least 32 of which must be in courses numbered in the 800 and 900 series, and meet the requirements specified below:


## Academic Standards

Academic standards for graduation require that each student maintain an average of 3.00 , or better, in all course work, including study undertaken in collateral courses; however, the accumulation of grades below 3.0 in more than two courses of 3 or more credits each removes the student from the degree program.

## Transfer Credits

A maximum of 10 transfer credits at the 800 level may be accepted toward the Master in Urban and Regional Planning degree.

For students who have been admitted to the dual JD-Master in Urban and Regional Planning program with Michigan State University - College of Law, a maximum of 9 credits from Michigan State University - College of Law may be transferred to the Master in Urban and Regional Planning program with a major in urban and regional planning. Transfer courses must be approved by the Director of the Urban and Regional Planning program. Credits taken prior to admission at Michigan State University - College of Law will not be accepted for transfer.

SOCIAL SCIENCE
School of Planning, Design and Construction

## Time Limit

The time limit for completing the degree is six years from the first semester of enrollment in the program.

## DEPARTMENT of POLITICAL SCIENCE

Richard C. Hula, Chairperson

## UNDERGRADUATE PROGRAMS

The undergraduate majors in political science are designed to provide students not only with a broad education in political and other social sciences but also with the analytical skills essential in many professions. The wide range of career opportunities open to political science graduates includes administrative positions in local, state, and federal government, or in public and private agencies; work with citizen's action groups and voluntary organizations; employment in the foreign service and various governmental and private international agencies; and careers as teachers and policy analysts. Because additional training beyond the bachelor's degree is necessary for some careers, many students in political science plan to attend law or graduate school.

Students in the Department of Political Science may select from three majors:

1. Political Science (General)
2. Political Science-Prelaw
3. Public Administration

## POLITICAL SCIENCE (GENERAL)

## Requirements for the Bachelor of Arts Degree in Political Science (General)

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Political Science (General)
The University's Tier II writing requirement for the Political Science (General) major is met by completing one of the following courses: Political Science 420, 421, 432, 440, 460, 461, 470. Those courses are referenced in item 3. a. (3) below.
For students who are admitted to Michigan State University as new freshmen and new transfer students in the Fall of 1993 and thereafter:
a. The completion of Mathematics 110 or 116 or 120 or 124 or 132 referenced in item 3. b. (2) below may also be used to satisfy the University mathematics requirement. However, a course that is used to satisfy the University mathematics requirement may not be counted toward the College of Social Science NATURAL SCIENCE, AND ARTS AND LETTERS, REQUIREMENT (referenced in section I.B. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement).
2. The requirements of the College of Social Science for the Bachelor of Arts degree.

The completion of Economics 201 and 202 referenced in item 3.b.(1) below partially satisfies the College of Social Science SOCIAL SCIENCE REQUIREMENT (referenced in section I. A. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement)
The completion of the History or Philosophy course referenced in item 3. b. (3) below partially satisfies the College of Social Science NATURAL SCIENCE, AND ARTS AND LETTERS, REQUIREMENT (referenced in section I.B. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement).
3. The following requirements for the major:

CREDITS
a. The following courses in the Department of Political Science:

30
(1) Two of the following courses (6 credits):

PLS 100 Introduction to American National Government

3 PLS 140 Introduction to Comparative Politics . . . . . . . . . . . . 3 PLS 160 Introduction to International Relations. . . . . . . 3 PLS 170 Introduction to Political Philosophy . . . . . . . . . . 3
(2) Both of the following courses (8 credits):

## PLS 200 Introduction to Political Science ............ . . 4 PLS 201 Introduction to Methods of Political

 Analysis3) One of the Political Science courses referenced in item 1 above and at least four additional Political Science courses at the 300-400 level to total at least 16 credits. Only one of the following courses may be counted toward this requirement:
PLS 494 Field Experience in Political Science
PLS 495 Independent Study
b. The following courses outside the Department of Political

Science:
(1) Both of the following courses (6 credits) EC 201 Introduction to Microeconomics. . . . . . . . . . . . 3

202 Introduction to Macroeconomics ........... 3
(2) One of the following courses (3 or 5 credits):

MTH 103 College Algebra.
................ . . 3
110 College Algebra and Finite Mathematics.
MTH 116 College Algebra and Trigonometry
MTH 124 Survey of Calculus with Applications I. ....... 3
MTH 132 Calculus I
A student who satisfies requirement 3.b.(2) by completing Mathematics 103 may satisfy the University mathematics requirement by completing one of the following courses in addition to Mathematics 103: Mathematics 104 or 124 or 201; Statistics and Probability 200 or 201. NOTE: A course that is used to satisfy the University mathematics requirement may not be counted toward the College of Social Science NATURAL SCIENCE, AND ARTS AND LETTERS, REQUIREMENT (referenced in section I.B. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement)
(3) One History or Philosophy course at the 300-400 level (3 credits).

## POLITICAL SCIENCE—PRELAW

The prelaw major is designed to introduce students to the study of law and the judicial process and at the same time to provide an orientation to the law which is more general than that of most law schools. Students who elect this program may plan careers in (1) government and large businesses, (2) law firms, (3) individual or partnership practice of civil law, (4) trial practice, including criminal law, and (5) teaching. Since very few law schools provide information about the political, economic, societal and psychological environment in which the law exists, this background must generally be acquired prior to or after law school. The prelaw major is intended to give students the analytical skills and substantive background in those courses which will most likely contribute to their development.

## Requirements for the Bachelor of Arts Degree in Political Science-Prelaw

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Political Science-Prelaw.

The University's Tier II writing requirement for the Political Science-Prelaw major is met by completing one of the following courses: Political Science 420, 421, 470 Those courses are referenced in item 3.a.(2) below
2. The requirements of the College of Social Science for the Bachelor of Arts degree
3. The following requirements for the major:
a. The following courses in the Department of Political Science:
(1) All of the following courses (20 credits):

PLS $100 \begin{array}{r}\text { Introduction to American National } \\ \text { Government. . . . . . . . . . . . . . . . . . . . . . . . . } 3\end{array}$
PLS 170 Introduction to Political Philosophy . . . . . . . . . . . . . . 3
PLS 200 Introduction to Political Science . . . . . . . . . . . 4
PLS 201 Introduction to Methods of Political Analysis.
LS 320 The American Judicial Process.. . . . . . . . . . . . . 3
PLS 321 American Constitutional Law. . . . . . . . . . . . . . . . 3
2) One of the Political Science courses referenced in item 1 above and two additional Political Science courses at the 300-400 level to total at least 10 credits. Only one of the fol-
lowing courses may be counted toward this requirement:
PLS 494 Field Experience in Political Science
PLS 495 Independent Study
b. The following courses outside the Department of Political Science:

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(1) Both of the following courses (6 credits):
    EC 201 Introduction to Microeconomics. . . . . . . . . . . 3
2) One of the following courses (3 or 5 credits):
    MTH 103 College Algebra m
    MTH 103 College Algebra............................ 3
    MTH 110 College Algebra and Finite Mathematics. ... 5
    MTH }124\mathrm{ Survey of Calculus I . . . . . . . . . . . . . . . . . . . . 3
    MTH 132 Calculus I....................................}
(3) Two of the following courses (6 or 7 credits):
    HST 318 United States Constitutional History . . . . . . . . }
    HST 350 Constitutional and Legal History 
    HST 351 Constitutional and Legal History 
    PHL 330 Formal Reasoning I. . . . . . . . . . . . . . . . . . . . . 4
    PHL 340 Ethics ...........................................
    PHL 354 Philosophy of Law ............................ 3
```


## PUBLIC ADMINISTRATION and PUBLIC POLICY

The Public Administration and Public Policy major is designed to prepare students for careers in the national, state and local public service. It aims at a broad understanding of the goals and problems of public administration and how these relate to the technical specialties of public administration: budget analysis, planning, organization and management methods, and personnel administration. The major is also valuable preparation for those who intend to engage in research for public agencies or voluntary associations interested in the problems of government, including unions, chambers of commerce, business corporations, farm organizations and citizen research organizations. A master's degree program concentrating in public administration is also available for advanced work in preparation for an executive career in government.

## Requirements for the Bachelor of Arts Degree in Public Administration and Public Policy

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Public Administration and Public Policy.
The University's Tier II writing requirement for the Public Administration and Public Policy major is met by completing Political Science 420. This course is referenced in tem 3.a.(3) below.
For students who are admitted to Michigan State University as new freshmen and new transfer students in the Fall of 1993 and thereafter:
a. The completion of Mathematics 110 or 116 or 120 or 124 or 132 referenced in item 3.b.(2) below may also be used to satisfy the University mathematics requirement. However, a course that is used to satisfy the University mathematics requirement may not be counted toward the College of Social Science NATURAL SCIENCE, AND ARTS AND LETTERS, REQUIREMENT (referenced in section I.B. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement).
2. The requirements of the College of Social Science for the Bachelor of Arts degree

The completion of Economics 201 and 202 referenced in item 3.b.(1) below and one of the Economics courses referenced in item 3.b.(4) below satisfies the College Social Science SOCIAL SCIENCE REQUIREMENT (referenced in section I. A. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement).
The completion of the History or Philosophy course referenced in item 3.b. (3) below partially satisfies the College of Social Science NATURAL SCIENCE, AND ARTS AND LETTERS, REQUIREMENT (referenced in section I.B. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement)
3. The following requirements for the major:

CREDITS
a. The following courses in the Department of Political Science:
(1) All of the following courses (20 credits)

PLS $100 \begin{array}{r}\text { Introduction to American National } \\ \text { Government. . . . . . . . . . . . . . . . . . . . . . . . } 3\end{array}$
PLS 200 Introduction to Political Science . . . . . . . . . . . 4
PLS 201 Introduction to Methods of Political Analysis . 4
3

PLS 313 Public Policy Analysis . . . . . . . . . . . . . . . . . . . 3
PLS 494 Field Experience in Political Science. . . . . . . . . . 3
(2) One of the following courses (3 credits):

PLS 140 Introduction to Comparative Politics . . . . . . . . 3
PLS 160 Introduction to International Relations. . . . . . . 3
PLS 170 Introduction to Political Philosophy . . . . . . . . . . 3
(3) Political Science 420 and one additional Political Science course at the 300-400 level in American politics to total at least 7 credits.
b. The following courses outside the Department of

Political Science: . . . . . . . . . . . . . . . . . . . . . .
(1) Both of the following courses ( 6 credits)
EC 201 Introduction to Microeconomics. . . . . . . . . . . . 3
EC 202 Introduction to Macroeconomics . . . . . . . . . . . . . 3
(2) One of the following courses (3 or 5 credits):

MTH 103 College Algebra.
MTH 110 College Algebra and Finite Mathematics....
MTH 116 College Algebra and Trigonometry . . . . . . . . . 5
MTH 124 Survey of Calculus with Applications I. . . . . . . 3 MTH 132 Calculus I
A student who satisfies requirement 3.b.(2) by completing Mathematics 103 may satisfy the University mathematics requirement by completing one of the following courses in addition to Mathematics 103: Mathematics 104 or 124 or 201; Statistics and Probability 200 or 201. NOTE: A course that is used to satisfy the University mathematics requirement may not be counted toward the College of Social Science NATURAL SCIENCE, AND ARTS AND LETTERS, REQUIREMENT (referenced in section I. B. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement).
(3) One approved History or Philosophy course at the 300-400 level from a list available in the Department of Political Science (3 or 4 credits).
(4) Two approved Economics courses at the 300-400 level from a list available in the Department of Political Science (6 credits).

## TEACHER CERTIFICATION OPTIONS

A political science disciplinary minor is available for teacher certification.

Students who elect the political science disciplinary minor must contact the Department of Political Science.

For additional information, refer to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

## GRADUATE STUDY

The Department of Political Science offers master's and doctoral degree programs.

The graduate degree programs in the Department of Political Science are designed to help students become thoroughly grounded in the knowledge base and research methods of political science. Training is given in the following fields of political science: American politics, comparative politics, international politics, public policy, political thought, formal theory, and research methodology.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

A bachelor's degree from an accredited educational institution is required for admission. Applicants should have the equivalent of an undergraduate major in political science, in a related social science, or in mathematics, statistics, or computer science. Some background in social science research methods, statistics, and/or basic mathematical operations is recommended. Normally, a minimum grade-point average of 3.20 in the last two years of undergraduate work is required for admission.

Applicants must take the Graduate Record Examination (GRE) General Test. Official results from this examination should be sent to the Department of Political Science.

Admission to the doctoral program is limited to fall semester only. For the Master of Public Policy program, most students are
admitted for fall semester; applications for the spring semester will be considered on the basis of available openings. Applications for admission and financial aid should be submitted by March 1. Applications for admission alone will be accepted until approximately May 15.

## Academic Standards

Graduate students must maintain a cumulative grade-point average of at least 3.00. Only those courses completed with a grade of 2.5 or higher may be counted toward the requirements for the master's or doctoral degree. A student who received two grades of 2.5 or below, or one grade of 2.0 or below, may be withdrawn from the program. A student who received three grades of 2.5 or below, or two grades of 2.0 or below, will be withdrawn from the program.

## POLITICAL SCIENCE

## Master of Arts

The Master of Arts program is designed to prepare students for doctoral studies. Those accepted are judged by the committee on admissions as qualified to enter the doctoral program, and it is anticipated they plan to complete this program at Michigan State University.

In addition to meeting the requirements of the University, of the College of Social Science, and of the Department of Political Science, students must meet the requirements specified below.

## Requirements for the Master of Arts Degree in Political Science

The program is available only under Plan B (without thesis). The student must meet the requirements specified below:

1. Complete at least 30 credits distributed as follows:
a. At least 24 credits in Political Science courses at the 800-900 level including Political Science 800, 801, and $802 \ldots$. CREDITS
b. No more than 6 credits in courses at the 400-900 level in related disciplines.
2. Submit two substantial research papers acceptable to the department.

These papers normally will be written in graduate seminars in Political
Science and will be evaluated by the instructor(s) of the courses.
With the written approval of the department, a student may complete fewer than 24 credits in Political Science courses and more than 6 credits in courses in related disciplines.

## Academic Standards

The student must maintain an overall grade-point average of 3.00 or higher.

## Transfer Credits

For students who have been admitted to the dual JD-MA program with Michigan State University-College of Law, a maximum of 12 credits from Michigan State University - College of Law may be transferred to the MA program with a major in political science.

## PUBLIC POLICY

The Master of Public Policy degree in Public Policy is designed to provide students with theoretical knowledge and specific skills essential for professional achievement in the public and non-profit sectors. The objective of this program is to develop an analytical approach to the public decision-making process through the systematic study of policy and policy analysis. Current professionals in the field of public policy or others who are interested in a career
in public policy in the non-profit sector or in government will find this program appealing.

In addition to meeting the requirements of the University, the College of Social Science, and the Department of Political Science, students must meet the requirements specified below.

## Requirements for the Master of Public Policy Degree in Public Policy

The program is available only under Plan $B$ (without thesis). The student must complete 39 credits in courses approved by the director of the Master in Public Policy program and distributed as follows:

1. Complete all of the following courses:

PPL 801 Quantitative Methods in Public Policy.
CREDITS

PPL 802
PPL 803 Quantitative Methods in Public
PPL 803 Quantitative Methods in Public Policy III.
PPL 805 Microeconomic Theory
PPL 806 Policy Evaluation.
PPL 807 Public Policy
PPL 808 Policy Development and Administration
PPL 809 Cost-Benefit Analysis in Public Policy.
PPL 810 Incentives and Public Policy .
PPL 813 Public Finance.
PPL 890 Policy Workshop
Students with no professional experience will be required to complete 3
credits of Public Policy 894 Field Experience Practicum.
3. Successful completion of a final examination or evaluation.

## Doctor of Philosophy

The doctoral degree is generally undertaken by students wishing to teach political science and government at the college level and by those seeking professional careers in political and social research. Special attention is given at the doctoral level to intensive training in political research.

In addition to meeting the requirements of the University, of the College of Social Science, and of the Department of Political Science, students must meet the requirements specified below.

## Requirements for the Doctor of Philosophy Degree in Political Science

The doctoral student must:
CREDITS

1. Earn at least 39 credits in political science courses including:
a. All of the following courses ( 15 credits):

PLS 800 | Proseminar: Political Theory and Research |
| :---: |
| Methods. ....................................... . . . |

PLS 801 Quantitative Techniques in Public Policy and
b. Four courses in a major field, approved by the student's guidance committee, selected from one of the following political science fields: American politics, comparative politics, international relations or political thought.
c. Three courses in a minor field, approved by the student's guidance committee, selected from one of the following political science fields: American politics, comparative politics, international relations, political thought, public policy, research methodology, or formal theory.
2. Pass a comprehensive examination in both the major and minor field
3. Successfully defend the dissertation.
4. Present the results of the dissertation research at a department colloquium.

## Academic Standards

After the first year of graduate study at MSU, the department evaluates the student's academic record. To be eligible to continue in the Ph.D. program in political science, the student must have:

1. an overall grade-point average of 3.00 or higher.
2. a grade of 2.5 or higher in each Political Science course.
3. no more than two grades of 2.5 or below in Political Science courses.
4. a record of performance in courses that, in the judgment of the faculty, indicates that the student should be capable of completing the Ph.D. degree in Political Science at MSU.

## DEPARTMENT of <br> PSYCHOLOGY

## Neal Schmitt, Chairperson

Psychology is a science and a profession concerned with behavior. As a science, psychology is concerned with theories, principles, facts and methods as they relate to understanding, predicting and influencing behavior of both humans and animals: how they perceive; how they learn and forget; how they think, fear, hate, and love; and how they develop their individualities or personalities. Psychology is both a biological and social science; it relates behavior to physiological and environmental conditions including social factors.

As a profession, psychology involves the use of the theories, principles, facts and methods of its science to assist individuals and groups in arriving at better solutions to psychological problems on which they seek consultation.

Courses in psychology provide cultural background, supplement the training of students in many other fields concerned with people, and sometimes become the area of major study for those who plan occupations emphasizing human relations. The student who plans a career in psychology, as such, will find graduate education a necessity. The undergraduate program emphasizes the scientific method and theories of behavior. The student is advised to obtain preparation in supporting subjects such as mathematics, philosophy of science, other biological and social sciences, foreign language, and literature.
Graduate program descriptions are available from the departmental website at: www.psychology.msu.edu.

## UNDERGRADUATE PROGRAMS

## Requirements for the Bachelor of Arts Degree in Psychology

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Psychology.
The University's Tier II writing requirement for the Psychology major is met by completing one of the following courses: Psychology 401, 402, 403, 405, 409, 410, 411, $413,424,440,441,442,450,455$, or 475 . Those courses are referenced in item 3. e. below.
2. The requirements of the College of Social Science for the Bachelor of Arts degree.

CREDITS
3. The following required major courses: . . . . . . . . . . . . . . . . . . . . . . . . . . . 31 or 32 a. All of the following courses:

PSY 101 Introductory Psychology . . . . . . . . . . . . . . . . . . . . 4
PSY 295 Data Analysis in Psychological Research . . . . . . . . 3
PSY $395 \begin{array}{r}\text { Research Design and Measurement in } \\ \text { Psychological Research . . . . . . . . . . . . . . . . . } 3\end{array}$
b. One of the following courses:

PSY 200 Cognitive Psychology . . . . . . . . . . . . . . . . . . . . . . 3
PSY 209 Brain and Behavior . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
c. One of the following courses:

PSY 235 Social Psychology . . . . . . . . . . . . . . . . . . . . . . . . . . 3
PSY 236 Personality . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
PSY 244 Developmental Psychology: Infancy
Through Childhood3
d. One of the following courses:

PSY 255 Industrial and Organizational Psychology . . . . . . . 3
PSY 270 Community Psychology. . . . . . . . . . . . . . . . . . . . . 3
PSY 280 Abnormal Psychology . . . . . . . . . . . . . . . . . . . . . . . 3
e. One of the following courses:

| PSY | 401 | Memory and Skill (W) |
| :---: | :---: | :---: |
| PSY | 402 | Sensation and Perception (W) |
| PSY | 403 | Laboratory in Cognitive Psychology (W) |
| PSY | 405 | History of Modern Psychology (W) |
| PSY | 409 | Psychobiology of the Life Span (W) |
| PSY | 410 | Neurobiology of Learning and Memory (W) |
| PSY | 411 | Hormones and Behavior (W). |
| PSY | 413 | Laboratory in Behavioral Neuroscience (W) |
| PSY | 424 | Child and Family Psychopathology (W) |
| PSY | 440 | Attitudes and Social Cognition (W) |
| PSY | 441 | Interpersonal Behavior and Groups (W) |
| PSY | 442 | Stereotypes, Prejudice, and Discrimination (W) |
| PSY | 450 | Thinking Critically About Psychological Research (W) |
| PSY | 455 | Organizational Research Techniques (W) |
| PSY | 475 | Personality Theories (W). |
| Electives in Psychology. |  |  |

## Requirements for the Bachelor of Science Degree in Psychology

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Psychology.
Students who are enrolled in the Psychology major leading to the Bachelor of Science degree in the Department of Psychology may complete an alternative track to Integrative Studies in Biological and Physical Sciences that totals 8 credits and consists of the following courses: (a) one course in Biological Science; (b) one course in Chemistry or one course in Physics (numbered 181B or higher); and (c) laboratory experience in biological or physical science totaling 2 credits. Courses taken for the alternative track may not be counted toward the College of Social Science NATURAL SCIENCE REQUIREMENT.
The completion of Mathematics 124 or Statistics and Probability 421 or higher. It may satisfy the University mathematics requirement or the College of Social Science NATURAL SCIENCE REQUIREMENT, but not both.
The University's Tier II writing requirement for the Psychology major is met by completing one of the following courses: Psychology 401 or 402 or 403 or 405 or 409 or 410 or 413 or 424 or 440 or 441 or 442 or 450 or 455 or 475 . Those courses are referenced in item 3. e. below.
2. The requirements of the College of Social Science for the Bachelor of Science degree. The completion of the science and mathematics courses referenced in item 4. below may also be used to satisfy the College of Social Science NATURAL SCIENCE REQUIREMENT (referenced in section II. C. under the heading Graduation Requirements for the Bachelor of Arts and Bachelor of Science Degrees in the College statement.)
3. The foll
a. All of the following courses:

PSY 395 Research
Psychological Research . . . . . . . . . . . . . . . . . 3
b. One of the following courses:

PSY 200 Cognitive Psychology . . . . . . . . . . . . . . . . . . . . . . 3
PSY 209 Brain and Behavior . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
c. One of the following courses:

PSY 235 Social Psychology . . . . . . . . . . . . . . . . . . . . . . . . . . 3
PSY 236 Personality . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
PSY 244 Developmental Psychology: Infancy
Through Childhood . . . . . . . . . . . . . . . . . . . . . 3
d. One of the following courses:

PSY 255 Industrial and Organizational Psychology . . . . . . . 3
PSY 270 Community Psychology. . . . . . . . . . . . . . . . . . . . . 3
PSY 280 Abnormal Psychology . . . . . . . . . . . . . . . . . . . . . . . . . . 3
e. One of the following courses:

PSY 401 Memory and Skill (W) . . . . . . . . . . . . . . . . . . . . . . 3
PSY 402 Sensation and Perception (W) ................ . . . 3
PSY 403 Laboratory in Cognitive Psychology (W) . . . . . . . . 3
PSY 405 History of Modern Psychology (W).
PSY 409 Psychobiology of the Life Span (W)
PSY 410 Neurobiology of Learning and Memory (W)
PSY 411 Hormones and Behavior (W). .
PSY 413 Laboratory in Behavioral Neuroscience (W) . .
PSY 424 Child and Family Psychopathology (W)
PSY 440 Attitudes and Social Cognition (W).
PSY 441 Interpersonal Behavior and Groups (W) . . . . . . . . . 3
PSY 442 Stereotypes, Prejudice, and Discrimination (W) . . 3
PSY 450 Thinking Critically About Psychological
Research (W)
.3
PSY 455 Organizational Research Techniques (W) ..................................
PSY 475 Personality Theories (W). . . . . . . . . . . . . . . . . . . . . 3
f. Electives in Psychology.
4. Other Required Courses.

Fifteen additional credits in science and mathematics from the College
of Natural Science beyond the courses used to satisfy the University
mathematics and alternative track requirements, and including at
least one course selected from the following areas:
Animal Behavior
ZOL 313 Animal Behavior . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
$\begin{array}{lll}\text { ZOL } & 313 & \text { Animal Behavior . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 3\end{array}$
$\begin{array}{lll}\text { ZOL } & 355 & \text { Ecology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 3 \\ \text { ZOL } & 315 & \text { Ecological Aspects of Animal Behavior. . . . . . . . . }\end{array}$
Genetics
$\qquad$3

$$
3
$$3

3
$\qquad$

| ZOL | 141 | Introductory Human Genetics | 3 |
| :---: | :---: | :---: | :---: |
| ZOL | 341 | Fundamental Genetics |  |
| ZOL | 445 | Evolution |  |
| Neuroscience |  |  |  |
| ZOL | 402 | Neurobiology . | 3 |
| ZOL | 430 | Neuroendocrine Aspects of Behavior |  |
| Physiology |  |  |  |
| PSL | 250 | Introductory Physiology. |  |
| PSL | 431 | Human Physiology I |  |

## Honors Opportunities

Several courses are especially suitable for students pursuing honors programs in psychology. Periodically an honors section of a regularly scheduled course may be offered. Qualified students may also seek to take any course in the department with an H -option by making advance arrangement with the instructor.

## TEACHER CERTIFICATION OPTIONS

A psychology disciplinary minor is available for teacher certification.
Students who elect the psychology disciplinary minor must contact the Department of Psychology.
For additional information, refer to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

## GRADUATE STUDY

The primary objective of graduate education in the Department of Psychology is to develop doctoral psychologists who are creative scholars. At the same time, students must develop the basic skills of their particular specialty and be well prepared for job entry duties and responsibilities through carefully supervised experience in research, teaching, and consulting. Relevant learning experiences are arranged in agencies such as industries, clinics, hospitals, schools, and government offices as needed by the individual student.
Every major program of study is designed to develop a purely scientific psychologist, or a scientific and professional psychologist in areas such as: behavioral neuroscience, cognition, industrial and organizational psychology, personality and social psychology, ecological/community psychology, and in clinical psychology. Clinical psychology graduate students also participate in two concentrations: a concentration in Multiculturalism and Diversity in Clinical Psychology and a concentration in Research Methods in Clinical Psychology.
The doctoral program in clinical psychology has been accredited by the American Psychological Association.
The Department of Psychology is affiliated with the Doctor of Philosophy degree program with a major in ecology, evolutionary biology and behavior. For information about a Doctor of Philosophy degree program that involves ecology, evolutionary biology and behavior and a major in the Department of Psychology, refer to the statement on the doctoral program in ecology, evolutionary biology and behavior in the College of Natural Science section of this catalog.
Students who are enrolled in master's or doctoral degree programs in the Department of Psychology may elect an Interdepartmental Specialization in Cognitive Science. For additional information, refer to the statement on Interdepartmental Graduate Specializations in Cognitive Science. For additional information, contact the Department of Psychology.
Students who are enrolled in Master of Arts degree programs in the Department of Psychology may elect a Specialization in Ecology, Evolutionary Biology and Behavior. For additional information, refer to the statement on the specialization in the College of Natural Science section of this catalog.

Students who are enrolled in Master of Arts and Doctor of Philosophy degree programs in the Department of Psychology may elect specializations in infant studies. For additional information, refer to the statement on Interdepartmental Graduate Specializations in Infant Studies.

## PSYCHOLOGY

## Master of Arts and Doctor of Philosophy

Students are accepted for graduate study in psychology only if judged by a departmental committee to be qualified to complete a doctoral degree, and programs of study are planned with this goal in mind; the master's sequence is generally developed as an integral part of the doctoral program with special attention given to the plans and needs of each student. Additional details are given under the doctoral program as outlined below. There is no terminal master's program.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission

Factors given major consideration for admission to the graduate program at the first-year level include (1) an approved bachelor's degree from a recognized college or university, (2) a junior-senior undergraduate grade-point average of 3.20 or better in academic studies, (3) undergraduate courses in experimental psychology and statistics, (4) satisfactory scores on the Graduate Record Examination General Test and Subject Test in Psychology, and (5) approval by a departmental committee. The same factors are considered for entrance at an advanced level, plus a record of scholarly achievements in the graduate study of psychology. That an applicant has achieved the above is not sufficient for admission. The number of applicants with superior qualifications exceeds the number of students that can be accommodated.

The department is especially interested in quality students and generally accepts them regardless of their undergraduate majors provided that they have adequate background for graduate study in psychology. Students meeting only the requirements for admission to provisional status are not generally accepted.

Students planning to apply for admission to graduate work in psychology should correspond with the department by October in order to meet the January 5 application deadline. This will allow time for tests and other formalities which must be completed before admission. Completed applications must be received by January 5 for consideration for the subsequent fall semester. Only rarely are new students admitted for semesters other than fall semester.

## Requirements for the Master of Arts and Doctor of Philosophy Degrees in Psychology

To meet individual needs, every student has a guidance committee with the student's adviser as chairperson. The committee develops a program of studies in consultation with the student. In the doctoral program, a comprehensive examination is required.

There is no general language requirement. Where acquaintance with a foreign language is necessary for advancing the special interest of a particular student, the guidance committee may impose foreign language requirements.

Clinical psychology graduate students also participate in two concentrations: Multiculturalism and Diversity in Clinical Psychology (Psychology 828, 853, 854, 855, 952, 954, and 3 credits of Psychology 994) and Research Methods in Clinical Psychology (Psychology 818, 828, 853, 854, 855, 952, and 954).

# SCHOOL of SOCIAL WORK 

Gary R. Anderson, Director

Social work is a profession that assists people in achieving life satisfaction through both personal and social changes. Social work's area of expertise is found at the interface of the person and the person's environment. Social workers use a variety of practice methods, in numerous settings, with diverse population groups encountering a multitude of social problems. The profession is particularly concerned with the needs of disadvantaged, vulnerable, and oppressed populations.
The first priority of the Michigan State University School of Social Work in education, research, and service concerns the welfare of disenfranchised and oppressed peoples in the state, nation, and international communities. The school's primary focus is promoting educational leadership in meeting direct practice, clinical practice, and research needs of social workers, social service agencies, and consumers, especially related to populations at risk. Understanding the value base and ethical code fundamental to social work practice is essential.
The primary educational goal of the undergraduate program is to prepare students for beginning generalist social work practice. The primary educational goal of the master's program is to prepare students for advanced social work practice. Two majors are available at the master's level: the clinical social work major and the organizational and community practice major. The clinical social work major is designed to prepare students to work with individuals, families, and small groups, using strategies of intervention that range from advocacy to psychotherapy. The organizational and community practice major is designed to prepare students to engage in administrative and community development tasks and intervention processes. The Doctor of Philosophy degree in Social Work, which is open to students who already have earned an M.S.W. degree, emphasizes the development, analysis, and application of social work knowledge, and is designed to prepare social workers for professional leadership positions in the academy and/or in selected practice, policy, or research settings.
The School of Social Work values and seeks a diverse student population in terms of gender, ethnicity, race, age, sexual orientation, ability, and socio-economic class, with various life and educational experiences and from all geographical areas.

## UNDERGRADUATE PROGRAM

The program leading to the Bachelor of Arts degree in social work is designed to prepare graduates for entry level positions in social work practice. The undergraduate program is grounded in the liberal arts and social sciences and is structured around courses in social work practice, social welfare policy, human behavior and the social environment, research, and a practicum experience. The rich resources of the University are used to create programs that are designed to prepare students for general social work practice and for graduate study. The program has been accredited by the Council on Social Work Education
The faculty of the School of Social Work has adopted diversity and its relationship to social justice as the signature theme of the undergraduate program. Information about diverse populations is incorporated into classroom and field work assignments. The school encourages its majors to study abroad in order to learn more about diverse populations.
The demands of the undergraduate program are substantial, and students with an interest in the field of social work are encour-
aged to seek academic advising and career counseling as early in their college careers as possible. Freshmen and sophomores who declare social work as their major preference receive academic advising in the school and may enroll in Social Work 200.

## Admission as a Junior

The number of students who can be admitted as juniors to the bachelor's degree program in social work is limited. Applications are accepted and reviewed only during the Spring semester of each year.

All persons who are interested in applying for admission as juniors to the bachelor's degree program in social work must request a special application form and detailed information regarding admission requirements and procedures from the School of Social Work, Room 254 Baker Hall.

Students who are enrolled in colleges and universities other than Michigan State University should contact MSU's Office of Admissions and Scholarships and the School of Social Work regarding admission to the bachelor's degree program in social work as transfer students.

To be considered for admission as a junior to the bachelor's degree program in social work, a student must have:

1. Submitted a completed application form by the deadline specified by the school.
2. Completed Social Work 200, which is a prerequisite for the 300-400 level courses required for the bachelor's degree.
3. Completed the courses in related areas referenced in items 3. b. (1) and 3. b. (2) under the heading Requirements for the Bachelor of Arts Degree in Social Work, with the exception of Computer Science and Engineering 101.
Admission to the bachelor's degree program in social work is competitive, and there is no guarantee that students with a major preference in social work will be admitted to the bachelor's degree program as juniors. In making admissions decisions, the faculty considers the relative qualifications of applicants, their suitability for the program, and the enrollment capacity of the program. Factors such as the diversity of the student body may also be considered in the selection process.

A student who has been admitted to the bachelor's degree program in social work for a given semester, but then decides not to enroll for that semester, would need to reapply for admission to the program. There is no guarantee that the student would be admitted to the program again.

## Honors Study

Students interested in honors study in social work should consult with academic advisers in the school.

## Requirements for the Bachelor of Arts Degree in Social Work

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Social Work.

The University's Tier II writing requirement for the Social Work major is met by completing Social Work 440. That course is referenced in item 3. a. below.
2. The requirements of the College of Social Science for the Bachelor of Arts degree The completion of any three of the courses referenced in item 3.b.(1) below satisfies the College requirement of a minimum of three courses totaling at least 9 credits in the following departments: Anthropology, Economics, Geography, Political Science, Psychology, and Sociology.

The completion of Physiology 101 or 250 or Zoology 341 referenced in item 3.b.(2) below partially satisfies the College requirement of a minimum of two courses in the College of Natural Science
3. The following required major courses:

CREDITS
a. All of the following Social Work courses: 38
SW 200 Introduction to Social Work SW 310 Human Behavior and Social Environment. . . . . . . 3


## GRADUATE STUDY

Students who apply for admission to graduate programs in the School of Social Work should be prepared for a rigorous schedule of course work combined with concurrent practicum experiences in diverse settings. The Master of Social Work degree program requires clear thinking, competence in written and oral expression, and emotional stability.
The School of Social Work offers two programs which have been accredited by the Council on Social Work Education (CSWE): a Master of Social Work (MSW) Advanced Standing (One Year) Program and a MSW Two-Year Program.

The MSW Two-Year Program requires 57 credits for the MSW degree. Students who are admitted to this program after having completed the equivalent of the first year of this program at another university are required to complete a minimum of 31 credits while enrolled in the MSW Two-Year Program at Michigan State University. A maximum of 26 credits of graduate level work in another program accredited by the CSWE may be applied to the credit requirements under the MSW Two-Year Program.

Students who hold a bachelor's degree in social work from a program that is accredited by the CSWE may apply for admission to the MSW Advanced Standing Program. This program requires a minimum of 38 credits for the MSW degree and can be completed full-time over one year, or part-time over two-years.

Students who are enrolled in Master of Social Work degree programs in the School of Social Work may elect to complete an optional certificate program in a variety of areas including school social work, law and social work, advanced clinical practice with families, organizational and community practice in the urban arena, or social work in aging.
Students who are enrolled in Master of Social Work degree programs in the School of Social Work may elect specializations in in-
fant studies. For additional information, refer to the statement on Interdepartmental Graduate Specializations in Infant Studies.

## Master of Social Work

The Master of Social Work degree programs include extensive required courses and course sequences in social work. Only Plan $B$ (without thesis) is available.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Admission to the MSW Two-Year Program

Students begin the master's degree programs in the fall because of the sequencing of required courses. Applicants should therefore seek admission during the previous fall. Students wishing to be considered for admission must file a special application form available from the School of Social Work. Although an undergraduate major or concentration in the social sciences or in social work may be helpful, it is not required.

Specific Requirements for Regular Admission:

1. A bachelor's degree from a recognized institution.
2. Normally a grade-point average of at least 3.00 (on a 4-point scale) during undergraduate study or in 14 or more credits of graduate study.
3. Evidence of personal qualities considered important for the practice of social work.
4. Completion of an undergraduate course in statistics or an approved equivalent.
5. Prior academic record including at least 19 semester credits in humanities, social sciences, and natural sciences.
Applicants will be judged on a combination of factors:
6. Grade-point average in undergraduate study or in 14 or more credits of graduate study.
7. Judgments by the faculty of the candidate's commitment to social work and suitability for the profession, based on a reading of the application.
8. Length and type of work and volunteer experience.
9. Three letters of reference.
10. Diversity considerations.

## Requirements for the MSW Two-Year Program

The student must complete 57 credits in specific social work instruction.

Required Courses for Both the Clinical Social Work Major and the
Organizational and Community Practice Major:

1. Required Core Courses ( 26 credits):

All of the required core courses must be completed before enrolling in additional courses required for the major.
SW 810 Theories of Groups, Organizations, and Communities in Social Work
SW 811 Social Work Perspectives in Human Development3
3

SW 820 Social Welfare Policy and Services. . . . . . . . . . . . . . . . . . . . . . . 3
SW $830 \quad \begin{array}{r}\text { Applied Social Work Research: Experimental } \\ \text { and Quasi-Experimental Designs . . . . . . . . . . . . . . } 3\end{array}$
SW 840 Generalist Social Work Practice Methods I. . . . . . . . . . . . . 3
SW 841 Generalist Social Work Practice Methods II . . . . . . . . . . . 3
SW 894A Social Work Field Education: Graduate Generalist
SW 894B $\begin{array}{r}\text { Social Work Field Education: Graduate Generalist } \\ \text { Practice II . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 4\end{array}$
2. Other Required Courses (17 credits):
a. Both of the following courses (6 credits): SW 832 Applied Social Work Research: Survey and Field Designs . .3 SW 845 Administrative Skills for Social Work Practice. . . . . . . . . . . 3
b. One of the following courses ( 3 credits): SW 808 Issues in Urban Policy and Services. . . . . . . . . . . 3


## Admission to the MSW Advanced Standing (One-Year) Program

Persons who hold a recent bachelor's degree in social work from a program that is accredited by the Council on Social Work Education (CSWE) may apply for admission to the MSW Advanced Standing (One-Year) Program.
Students are admitted only for summer semester. Applicants should therefore seek admission during the previous fall. Students wishing to be considered for admission must file an application available from the School of Social Work, 254 Baker Hall.
To be considered for admission to the MSW Advanced Standing program, a person must have:

1. a bachelor's degree in social work from a program that is accredited by the CSWE and granted within the last six years.
2. a grade-point average of at least 3.25 (on a 4 -point scale) during undergraduate study.
Applicants will be judged on a combination of factors:
3. Judgments by the faculty of the candidate's commitment to social work and suitability for the profession, based on a reading of the application.
4. Length and type of work and volunteer experience.
5. Three letters of reference, including an evaluation from the undergraduate faculty or agency practicum instructor or from the most recent social work supervisor.
6. Evidence of personal qualities considered important for the practice of social work.
Persons who are admitted to the MSW Advanced Standing program must have completed an undergraduate course in statistics or an approved equivalent at the time of matriculation.

## Requirements for the MSW Advanced Standing (One-Year) Program

The student must complete 38 credits in specific social work instruction.
CREDITS
Required Courses for Both the Clinical Social Work Major and the
Organizational and Community Practice Major:

1. Required Core Courses (Summer Semester) (6 credits):

All of the required core courses must be completed before enrolling in additional courses required for the major.
SW 812B Integration of Theory, Policy, and Evaluation in Social Work.
.2
. .2
SW 842B Advanced Generalist Social Work Practice Methods ... 2
SW 893B Social Work Field Education: Advanced Generalist Practice
. 2
2. Other Required Courses ( 18 credits):
a. Both of the following courses ( 6 credits):

SW 832 Applied Social Work Research: Survey and Field Designs.
SW 845 Administrative Skills for Social Work Practice.... 3
b. One of the following courses (3 credits):

SW 808 Issues in Urban Policy and Services. . . . . . . . . . . . 3
SW 822A Social Welfare Policy and Services:
Children, Youth and Families

SW 822B Social Welfare Policy and Services: Adults. . . . . . 3
SW 822C Social Welfare Policy and Services: Aging . . . . . . 3
c. Nine credits of electives of social work related courses. The
courses used to satisfy this requirement must be approved by the student's academic adviser.

Additional Required Courses for the Organizational and Community
Practice Major
SW 863 Organizational and Community Social Work Practice I. . 3
SW 864 Organizational and Community Social Work Practice II . 3
SW 894G Social Work Field Education: Organizational and Community Practice I.
. .4
SW 894I $\begin{array}{r}\text { Social Work Field Education: Organizational and } \\ \text { Community Practice II . . . . . . . . . . . . . . . . . . . . . } 4\end{array}$
SW 894I $\begin{gathered}\text { Social Work Field Education: Organizational and } \\ \text { Community Practice II . . . . . . . . . . . . . . . . . . . . . . } 4\end{gathered}$

## Residence

One year of residence consisting of two consecutive semesters and involving at least 7 credits of graduate course work each semester is required. If students attend part-time, the residency requirement must be met in the year that the advanced methods and practicum courses are being completed.

## Part-Time Students

Both the MSW Two-Year Program and the MSW Advanced Standing (One-Year) Program are available on a part-time basis.

At the time of admission, students must apply for either part-time or full-time study. Students may not transfer between part-time and full-time study without approval of the school.

Part-time students must progress through a plan of study as specified by the school. All students must meet their residence requirements during the year in which they are enrolled in the advanced practice and field instruction courses.

## Doctor of Philosophy

The Doctor of Philosophy in Social Work is an interdisciplinary program rooted in the historical, epistemological, and philosophical bases of social work. It is designed to prepare social workers for leadership positions in the profession as educators, researchers, policy makers, and/or administrators. It places emphasis on the development, analysis, and application of social work knowledge related to professional practice, and is designed to contribute to the advancement of knowledge in the social work profession and field of social welfare.

In addition to meeting the requirements of the University and the College of Social Science, students must meet the requirements specified below.

## Admission

The doctoral program in social work invites applications from experienced social workers who hold a Master of Social Work (MSW) degree from a Council on Social Work Education (CSWE) accredited graduate program. Applicants must provide evidence of outstanding professional competence, academic excellence and a capacity to develop concepts and articulate issues related to the social work profession, and an interest in advanced social work research, education, and practice. Applicants with outstanding academic records may be admitted to the program provisionally and permitted to make up deficiencies on a collateral basis.

## Requirements for the Doctor of Philosophy Degree in Social Work

The program requires 21 credits in post-master's social work education, including the completion of a research internship. Students must also take 18 credits of course work outside the School of Social Work including 6 credits of statistics and 12 credits in a social science discipline or focused cognate. In addition, students must complete a comprehensive examination administered by the student's guidance committee, complete 24 credits of dissertation research, and successfully defend the dissertation.

## DEPARTMENT of SOCIOLOGY

## Janet L. Bokemeier, Chairperson

With global transformation, the world is rapidly changing. People, goods, markets, ideas and capital are moving across global boundaries at ever-increasing rates. Global processes are transforming societies, changing our cities, the ways we communicate, our health and longevity, environmental risks; and leading to new risks and opportunities such new forms of work, patterns of family living, health care delivery, and ways to distribute food. Given these extensive global changes, sociology itself is changing and domestic and international issues are often interrelated. Global transformation provides unification for the department's diverse activities including the research and scholarship of its faculty, graduate students, and undergraduates.

## UNDERGRADUATE PROGRAM

Sociologists study how societies are organized, how they change, and how they interact. The department's undergraduate program is designed to give students an understanding of societies throughout the world and of the major patterns of social behavior and organization in the United States. Courses deal with the basic institutions of society: economy and industry, education, family, health care and medicine, politics, sciences, and technology. Students examine how change occurs in rural and urban communities, in the environment, and in bureaucracies. They consider how knowledge may be applied to introduce social change.

Courses on international change and development, sex and gender, racial and ethnic inequality, and changes in the lifecycle focus on the rich cultural and social diversity of individual and group behavior. Courses in social psychology and personality enable students to understand how individual behavior is affected by group life. Courses that focus on fundamental methods and techniques of research are important for understanding how to collect and interpret data on individual and group behavior. Opportunities are available for participation in faculty research projects.
Sociology graduates may pursue positions in business, public service, sales research, teaching, and administration. Some students have used their bachelor's degrees in sociology as a foundation for graduate and professional study in medicine, law, business, urban planning, social work, labor and industrial relations, and public health, or for advanced graduate study in preparation for careers as college teachers and researchers.

## Requirements for the Bachelor of Science Degree in Sociology

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Science degree in Sociology.
The University's Tier II writing requirement for the Sociology major is met by completing Sociology 488 or 499. Those courses are referenced in item 3. a. below.

The completion of Statistics and Probability 200, 201, 421 or 422, referenced in item
4. below may also satisfy the University mathematics requirement or the College of Social Science NATURAL SCIENCE REQUIREMENT, but not both.
2. The requirements of the College of Social Science for the Bachelor of Science degree.

CREDITS
3. The following required major courses:
a. All of the following courses:

SOC 100 Introduction to Sociology. . . . . . . . . . . . . . . . . . . . . 4
SOC 241 Social Psychology.................................. . . 3
SOC 281 Methods of Social Research I.................. . . 4
$\begin{array}{lll}\text { SOC } & 282 & \text { Methods of Social Research II .................... } 4 \\ \text { SOC } & 488 & \\ \text { Sociological Theory (W) }\end{array}$
OC 499 Sociological Theory (W)
Contemporary Society (W) . . . . . . . . . . . . . . . . 3
b. One of the following courses that are related to diversity:
SOC 215 Race and Ethnicity . . . . . . . . . . . . . . . . . .

SOC 215 Race and Ethnicity ..................................... . . . . . 3
$\begin{array}{lll}\text { SOC } & 216 & \text { Sex and Gender. } \\ \text { SOC } & 330 & \text { Social Stratification }\end{array}$
.3
c. A minimum of three additional Sociology courses at the 300 level or higher, at least one of which must be at the 400 level
4. The College's NATURAL SCIENCE REQUIREMENT for the Sociology major is met by completing 15 additional credits in the natural sciences selected as follows.
a. One of the following courses in computer science:

CSE 101 Computer Concepts and Competencies ........ . 3
CSE 131 Introduction to Technical Computing. . . . . . . . . . . . . 3
CSE 231 Introduction to Programming I. . . . . . . . . . . . . . . . . . 4
CSE 232 Introduction to Programming II . . . . . . . . . . . . . . . . 4
b. One of the following courses:

STT 200 Statistical Methods I ................................. 3
STT 201 Statistical Methods II. . . . . . . . . . . . . . . . . . . . . . . . . 4
STT 421 Statistics I........................................ . .
c. At least 9 additional credits in the following departments or programs: Biochemistry and Molecular Biology, Biological Science, Chemistry, Entomology, Geological Sciences, Mathematics, Microbiology and Molecular Genetics, Physics and Astronomy, Plant Biology, Plant Pathology, Statistics and Probability, and Zoology. The completion of courses taken in fulfillment of the University Mathematics requirement may not apply towards this requirement. Students should see their academic adviser to obtain a list of approved courses which will meet this requirement.

## Requirements for the Bachelor of Arts Degree in Sociology

1. The University requirements for bachelor's degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Sociology.
The University's Tier II writing requirement for the Sociology major is met by completing Sociology 488 or 499. Those courses are referenced in item 3. a. below.
2. The requirements of the College of Social Science Bachelor of Arts degree.
3. The following required major courses:
a. All of the following courses:

SOC 100 Introduction to Sociology. . . . . . . . . . . . . . . . . . . . . 4
SOC 241 Social Psychology
SOC 281 Methods of Social Research I . . . . . . . . . . . . . . . . . 4
SOC 282 Methods of Social Research II . . . . . . . . . . . . . . . . 4
SOC 488 Sociological Theory (W) . . . . . . . . . . . . . . . . . . . 3
Social Issues and Chang
Contemporary Society (W) . . . . . . . . . . . . . . . . 3
b. One of the following courses that are related to diversity:
SOC 215 Race and Ethnicity . . . . . . . . . . . . . . . . . . . . 3
$\begin{array}{lll}\text { SOC } & 215 & \text { Race and Ethnicity . . . . . . . . . . . . . . . . . . . . . . . . . . } 3 \\ \text { SOC } & 216 & \text { Sex and Gender . . . . . . . . . . . . . . . . . . . . } 3\end{array}$
SOC 216 Sex and Gender . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
c. A minimum of three additional Sociology courses at the 300 leve or higher, at least one of which must be at the 400 level

## TEACHER CERTIFICATION OPTIONS

A sociology disciplinary minor is available for teacher certification. Students who elect the sociology disciplinary minor must contact the Department of Sociology.

For additional information, refer to the statement on TEACHER CERTIFICATION in the Department of Teacher Education section of this catalog.

## GRADUATE STUDY

Graduate education in the Department of Sociology is intended to develop professional sociologists who will be creative researchers, scholars, teachers, and practitioners. The graduate program features four major areas of scholarly concentration:
The department offers three major research theme areas of concentration:

1. Food, environment, agriculture, science and technology (FEAST). Areas of study include population, science and technology, community, ecology, environment, risk and food safety, agriculture, grades and standards,
2. Family and gender. Areas of study include sex and gender, youth, families and diversity (race, ethnicity, poverty, international), the links between gender, race, class and national inequalities across the globe, family and gender in the changing workplace.
3. Health and well-being. Areas of study include the social contexts of health, illness, and health care, the subjective experience of health and illness, medical sociology with organizational and social psychological perspectives, health risk, health and inequality, food and health, and demography.
4. Urban, race and migration. Areas of study include new urban sociology, social movements, identities, ethnicity and race, sociology of culture, migration and immigration, transnationalism, diasporas.
Students are provided a wide range of training in theory and research methodology.
The department theme, global transformation, involves a commitment to global and international projects and programs. This sociological work focuses on the challenges of global understanding of social, political and cultural differences as well as understanding how a global context explains social processes, change, and inequality.
Students who are enrolled in Master of Science degree programs in the Department of Sociology may elect a Specialization in Food Safety. For additional information, refer to the statement on the specialization in the College of Veterinary Medicine section of this catalog.
Students who are enrolled in Master of Arts and Doctor of Philosophy degree programs in the Department of Sociology may elect specializations in infant studies. For additional information, refer to the statement on Interdepartmental Graduate Specializations in Infant Studies.
For further information about graduate study in sociology, consult the department's Graduate Manual or visit www.soc.msu.edu

## SOCIOLOGY

Although the department views the Doctor of Philosophy degree as the terminal degree in sociology, a master's degree program with a major in sociology is available.

## Master of Arts

The master's program is designed to give the student a general background in sociological theory and methodology, as well as an introduction to a major substantive area of the discipline. Students who complete the program may conduct standard social research projects, teach introductory sociology courses, direct several kinds of social action programs, or apply for admission to a doctoral degree program in sociology.

Students who are not employed full-time should complete all of the requirements for the master's degree with a major in sociology within two years of initial enrollment in the program.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Requirements for the Master of Arts Degree in Sociology

The program is available only under Plan A (with thesis). The student must meet the requirements specified below:

1. Complete 30 credits including:
a. One course in each of the following three areas: theory, methods, and statistics.
b. At least three courses in one of the department's three major research theme areas of concentration referenced above.
2. Present the thesis at a colloquium of the faculty who are associated with the student's major research theme area of concentration. The presentation must be acceptable to the faculty.
3. Participate in the teaching assistant workshop offered by the department.
4. Participate in the Sociology Graduate Seminar for First-Year Students.

## Doctor of Philosophy

The doctoral degree program in sociology is designed to give the student a general background in sociological theory and methodology, as well as training in a major substantive area of the discipline. Although the requirements for the Master of Arts degree with a major in sociology are an integral part of the doctoral program, students who are enrolled in the doctoral program are not required to earn a master's degree.

All doctoral students should gain some teaching experience, if possible.

The student's academic adviser serves as the chairperson of the student's guidance committee.

Specific procedures and criteria for the evaluation of comprehensive examinations are presented in the department's Graduate Manual.

In addition to meeting the requirements of the University and of the College of Social Science, students must meet the requirements specified below.

## Requirements for the Doctor of Philosophy Degree in Sociology

The student must meet the requirements specified below:

1. One course in each of the following four areas: classical theory, contemporary theory, methods, and statistics.
2. At least one additional course in theory, methods, or statistics.
3. A program of study in one of the department's three major research theme areas of concentration referenced above that includes:
a. At least five courses, at least three of which must be MSU Sociology courses.
b. Additional courses related to the student's needs and interests. With the approval of the student's guidance committee, the additional courses may be in any of the department's three major research theme areas of concentration referenced above.
4. During the second year of study toward the doctoral degree, present an original research paper at a colloquium of the faculty who are associated with the student's major research theme area of concentration. The presentation must be acceptable to the faculty.
5. Participate in the teaching assistant workshop offered by the department.
6. Participate in the Sociology Graduate Seminar for First-Year Students.

## Academic Standards

At the end of the second year of study toward the doctoral degree, the faculty evaluates the student's performance in courses, the student's presentation of the original research paper, and the recommendations of the student's guidance committee. On the basis of that evaluation, the faculty decides whether or not the student should continue in the doctoral program.

## PROGRAM in WOMEN, GENDER, and SOCIAL JUSTICE

## Jayne A. Schuiteman, Acting Director

The Women, Gender, and Social Justice program is a cross-disciplinary academic unit that is administered jointly by the College of Social Science and the College of Arts and Letters; the College of Arts and Letters is the primary administrative unit. The program offers a cross-disciplinary major in women's studies leading to the Bachelor of Arts degree. In addition, an undergraduate specialization in Women, Gender, and Social Justice is offered. For additional information, refer to the Women's Studies Program statement in the College of Arts and Letters section of this catalog.

## CENTER FOR ADVANCED STUDY OF INTERNATIONAL DEVELOPMENT

## Jeffrey M. Riedinger, Director

The Center for Advanced Study of International Development (CASID) is a multidisciplinary unit, organized within the College of Social Science in cooperation with the Office of the Dean of International Studies and Programs and strengthened by the participation of scholars from a variety of other colleges.

CASID promotes and coordinates the work of faculty and students interested in study of international development from the perspective of the social sciences and liberal arts. Since 1981, CASID has been funded by the U.S. Department of Education to operate as a National Resource Center for Foreign Language and International Studies and to award Foreign Language and International Studies Fellowships under Title VI of the Higher Education Act.

CASID promotes undergraduate and graduate programs in international development, works with academic units to assure continued availability and quality of relevant course offerings, coordinates issue-oriented interest groups, and offers a wide range of scholarly presentations and outreach services. CASID also provides assistance to faculty seeking external funding for cross-disciplinary international development research and project activities.

An undergraduate Specialization in International Development is available to interested students. For additional information, refer to the statement on Specializations in the Undergraduate Education section of this catalog.

## CENTER FOR GLOBAL CHANGE AND EARTH OBSERVATIONS

## Jiaguo Q, Director

The Center for Global Change and Earth Observations (CGCEO) is an interdisciplinary research unit administered by the College of Social Science in collaboration with the College of Natural Science, the College of Agriculture and Natural Resources and the Michigan Agricultural Research Station. Faculty from across the University participate in research focused on the study of global environmental change using geospatial information technologies and earth observation satellites to measure, analyze and predict the human and physical processes of global environmental change. The Center strives to strengthen interdisciplinary approaches for understanding global change at all scales, from the regional to the global, using the tools of the social and physical sciences.

The Center promotes basic and applied research on global environmental change in key areas including land use and cover change, coupled human and natural systems, coupled biological and physical systems, deforestation, biodiversity, sustainable development, environmental monitoring and natural resource management. It also seeks to promote the coupling of global scale environmental research with local applications and problem solving. Research is supported through external funding from federal agencies, international organizations, the private sector and foundations.

The Center develops and uses new tools of geographic information sciences, including open and distributed geographic information systems, satellite remote sensing, spatial and agent-based numerical modeling, field-based sampling, and in-ternet-based spatial decision support systems. It conducts research around the world, but mostly centered in Brazil, Ecuador, Costa Rica, Russia, Africa, Southeast Asia, and China as well as in the Great Lakes and throughout the United States. The Center provides support to graduate research, education and training within the three collaborating colleges and provides academic support for curricula in geographic information science, global change science, and environmental science.

# MATRIX: THE CENTER for the HUMANE ARTS, LETTERS, and SOCIAL SCIENCES ON-LINE 

## Mark L. Kornbluh, Director

MATRIX seeks to advance critical understanding and promote access to knowledge through world-class research in humanities and social science technology. Humanities and social science technology brings together the humanist's quest for deeper understanding of human nature, thought, expression, and behavior with the tools, methods and applications of computer science, engineering, and information and library sciences. MATRIX researchers use networked technologies to advance, mediate, and inform the humanist disciplines of history, literature, language, philosophy, as well as disciplines within the arts, social sciences, and education. At MSU, MATRIX partners in music, speech and audiology, history, education, international studies, museum studies, and libraries are building new, global, networked resources and services that give life to the metaphor of "matrix" as the multiple intersections and applications of interdisciplinary research. Located administratively within the College of Social Science, MATRIX collaborates with scholars and students across the University.
MATRIX applies humanities technology to all the elements of MSU's mission: research, education, outreach, and service to multiple public and professional communities. Guided by basic scholarly and humanist values of excellence, education, access, and inclusiveness, and conducted according to proven, collaborative, scientific methods and principles, MATRIX aims to be one of the top humanities and social science technology centers in the world. To this end, the mission of MATRIX, The Center for Humane, Arts, Letters, and Social Sciences Online is to serve as a catalyst for and incubator of the emerging fields and disciplines resulting from the integration of the humanities and social sciences with information technologies.

MATRIX has identified five broad strategic goals that describe the national research agenda in humanities technology:

1. Broaden preservation and access to cultural heritage resources: advance creation, preservation, access to and interpretation of the human record, through collaborative research and development of major, online cultural heritage resources.
2. Transform teaching and learning: forge effective partnerships in communications, education, and computer science, pioneer research and development of pedagogical applications of new digital technologies for the arts, humanities, and social sciences.
3. Advance professional networking within and across disciplines: research, develop, and implement tools to enhance networking and develop new forms of online publication within the academy and the broader public.
4. Promote public involvement and improve digital equity in outreach: research, develop and apply networked technologies to build domestic and international linkages, ensure digital equity and support civil society.
5. Foster new scholars and scholarship: facilitate the creation of a new generation of scholars to research, build, and utilize new technologies for research and teaching, and to pioneer a new type of interdisciplinary humanities scholarship.
For additional information, visit MATRIX: www.matrix.msu.edu.

> CENTER for REMOTE SENSING and GEOGRAPHIC INFORMATION SCIENCE RESEARCH and OUTREACH SERVICES

Center for Remote Sensing and Geographic Information Science Research and Outreach Services (RSGIS) is administered by the Department of Geography in the College of Social Science. The unit was established to strengthen and support the utilization of geographic information systems technologies and of remote sensing in research, instruction, and extension programs of academic departments.

RSGIS promotes interdisciplinary research through the collaborative efforts of faculty investigators, research assistants, and students in 14 departments. Major areas of research include land and water use and change-detection studies, planned economic development, forest inventory, agricultural assessment, biological productivity, environmental monitoring, data base development for land resources planning and management, crop stress evaluation, and terrain analysis.

Professional staff are available for consultation and technical assistance to faculty members and students. The Center publishes technical reports and newsletters and sponsors seminars and short courses.

## INSTITUTE FOR PUBLIC POLICY AND SOCIAL RESEARCH

The Institute for Public Policy and Social Research is a Univer-sity-wide research institute for which the College of Social Science is the lead college. The Institute provides research and technical assistance programs aimed at state, regional, and local levels of government, and research on national and international comparative issues affecting regional and local developments. Faculty associated with the Institute pursue multidisciplinary research projects. Institute personnel have computer programming, data management, statistical, survey analysis, and methodological expertise. The Institute contains the following programs and support units:

SURVEY RESEARCH FACILITY. The Institute specializes in telephone interviews and mailed questionnaires in support both of applied and basic research, and provides consulting in sampling design, statistical analysis, and other technical aspects of survey research.

LEGISLATIVE LEADERSHIP PROGRAM. Sponsored in conjunction with MSU Extension, this program links scholars, legislators, and practitioners in a discussion of public policy issues and the policy making process. LLP kicks off every two years shortly after state elections with a three-day session for newly elected state legislators on current public policy issues. LLP sponsors ongoing informal meetings among faculty and legislators to further discuss policy issues and relevant research..

SOCIAL SCIENCE
Institute for Public Policy and Social Research

MICHIGAN POLITICAL LEADERSHIP PROGRAM. This scholar-ship-funded certificate program is designed for those seeking greater involvement in the public policy process, particularly while serving in public office. Successful applicants participate in a curriculum that provides a solid foundation in practical politics, public policy analysis and process, personal leadership development, and effective governance.

PUBLIC POLICY FORUMS. The Institute organizes and carries out regular forums on topics of timely interest for legislators and other governmental decision-makers.

TOMORROW'S POLITICAL LEADERS. TPL is a bold new program seeking to bring together a diverse sampling of upper-division undergraduates and recent graduates of Mlchigan's colleges and universities. In addition to providing extensive training on campaigning and the political process in Michigan, TPL will also give its young participants a chance to see and interact with Michigan's government "behind the scenes."

